

Technical Manual

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Product finder

Application areas

Sealing	Flat roof	Balcony	Park- ing level	Interior	Kitchen	Bathroom / wet rooms
KEMPER- OL 1K-PUR	✓	✓	X	X	X	X
KEMPER- OL 1K-SF	✓ ²	✓ ²	X	X	X	X
KEMPER- OL 2K-PUR	✓	✓	✓	✓	✓	✓
KEMPEROL AC Speed	✓	✓	✓	X	X	X
KEMPEROL AC Speed+	✓ ¹	✓ ¹	✓ ¹	X	X	X
KEMPER- OL V 210 M	✓	X	X	X	X	X
KEMPER- OL BR M	X	X	✓	X	X	X
KEMPEROL 022	X	X	X	✓	✓	✓
KEMPEROL LF	✓	✓	X	X	X	X
KEMPEROL Roofpatch	✓	X	X	X	X	X
KEMPEROL RepairFix LF	✓	X	X	X	X	X

1 Detail sealing
2 not re-coatable

Combinations of sealings and coatings

	KEM- PEROL 1K-PUR	KEM- PEROL 2K-PUR	KEM- PEROL V 210 M	KEMPER- OL BR M	KEMPER- OL AC Speed	KEMPER- OL 1K-SF	KEMPER- OL 022	KEMPER- DUR® TC	KEMPER- DUR AC coating
KEMPER- DUR Deko	✓	✓	X	X	X	X	Individ- ual test	✓	X
KEMPER- DUR Deko trans- parent	✓	✓	X	X	X	X	Individ- ual test	✓	X
KEM- PERDUR Deko 2K	✓	✓	X	X	X	X	Individ- ual test	✓	X
KEM- PERDUR HB thick coating	✓	✓	X	X	X	X	Individ- ual test	Individ- ual test	Individ- ual test
KEMPER- DUR TC coating	✓	✓	X	X	✓	X	Individ- ual test	✓	Individ- ual test
KEMPER- DUR AC coating	X	X	✓	✓	✓	X	Individ- ual test	Individ- ual test	✓

	KEM- PEROL 1K-PUR	KEM- PEROL 2K-PUR	KEM- PEROL V 210 M	KEMPER- OL BR M	KEMPER- OL AC Speed	KEMPER- OL 1K-SF	KEMPER- OL 022	KEMPER- DUR® TC	KEMPER- DUR AC coating
KEMPER- DUR AC- Finish	✓	✓	✓	✓	✓	X	Individ- ual test	X	✓
KEMPER- DUR EP- Finish	Individ- ual test	✓	Individ- ual test	Individ- ual test	✓	X	Individ- ual test	✓	✓
KEM- CO QB1 Binder	✓ ⁵	✓ ⁵	X	X	✓ ⁵	X	Individ- ual test	Individ- ual test	✓ ⁵
KEM- PERTEC EP / EP5 Primer ^{3,4}	✓	✓	✓	✓	Individ- ual test	X	Individ- ual test	Individ- ual test	Individ- ual test
KEM- PERTEC AC Primer ^{3,4}	✓	✓	✓	✓	✓	X	Individ- ual test	Individ- ual test	✓

3 as bonding bridge
4 as alkali protection
5 Bonding bridge required

✓ = suitable

X = not suitable

Priming recommendation KEMPEROL 2K-PUR waterproofing

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suitable = ✓

unsuitable = –

Individual test = •

This table serves as a guidance for planning and execution and should only be seen as a recommendation. However, for individual objects suitability tests (individual tests) may be necessary as the whole system design has to be considered. All substrates must be free from material which may affect adhesion (grease, separating agents, loose talcum etc. - also refer to Technical Information TI 21). You can request information on primers that are not specified here from our Technical Hotline on +49 561/8295-5555.

Substrates	KEM- PERTEC AC Primer	KEMCO 1K Primer	KEM- PERTEC EP / EP5 Primer	KEM- PERTEC R Primer	KEM- PERTEC FPO Primer / KEMPER- PLAN Primer	KEM- PERTEC Glass Primer	without priming
Flexible bitumen sheeting (V 13, V 60, G 200, PYE (SBS))	•	–	✓	✓	–	–	✓ ⁴
Flexible APP bitumen sheeting	•	–	•	•	–	–	•
Asphalt, weathered	•	–	✓	✓	–	–	–
Flexible synthetic sheeting (EPDM, PE, PP, PIB)	•	–	•	•	•	–	•
Flexible synthetic sheeting (PVC-P, PVC-EVA)	•	–	•	✓ ²	•	–	✓ ^{2,4}
Flexible FPO or TPO synthetic sheeting	–	–	–	–	✓ ²	–	–
Plastic elements (PVC-U, PVC-C)	•	–	•	•	•	–	✓ ^{2,4}
Plastic elements (HDPE, HDPP, PE-HD, PP-H)	•	–	•	•	•	–	•
Board materials (fibre cement, gypsum boards and gypsum fibre-boards)	•	–	✓	–	–	–	–
Clinker, bricks, split tiles, face brick-work (grind surface)	•	–	✓	–	–	–	–
Concrete, screed, plaster (MG P II/III)	•	–	✓	–	–	–	–
Plastic-modified screeds and mortar (PCC)	•	–	✓	–	–	–	–
Bricks and blocks for structural shell (lightweight concrete, sand-lime, concrete, Aerated concrete, pumice stone, etc.)	•	–	✓	–	–	–	–
Tiling - MEK cleaned	•	–	✓	•	–	–	•
Glass (non-tempered - uncoated) - MEK cleaned	•	–	✓	•	–	✓	•
Zinc, galv. steel	•	–	✓ ^{2,3,4}	✓ ²	–	–	–
Copper, lead	•	–	✓ ²	✓ ²	–	–	–
Steel, stainless steels (V2A, V4A), aluminium	•	–	✓ ^{2,3}	✓ ^{2,3,4}	–	–	–
Open-pored insulating materials (polystyrene, mineral wool, foam glass)	•	–	✓ ^{4,6}	✓ ^{4,6}	–	–	–
closed-cell insulating materials (polyurethane etc.)	•	–	✓ ^{4,6}	✓ ^{4,6}	–	–	–
wooden boards, plywood, chip-board, OSB	•	–	✓ ^{4,6}	✓ ^{4,6}	–	–	–

2 Cleaning with KEMCO MEK Cleaning Agent and mechanical pre-treatment (only the area to be sealed) is necessary.

3 In the event of increased requirements mechanical fastening is recommended.

- 4 On this substrate, overlapping of more than 10 cm is required.
6 Necessary measures according to relevant and applicable guidelines.

When using this priming table, the application instructions and technical information of KEMPER SYSTEM must be strictly adhered to. Please observe our warranty clause for application instructions:

Priming recommendation KEMPEROL 1K-PUR waterproofing

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suitable = ✓

unsuitable = –

Individual test = •

This table serves as a guidance for planning and execution and should only be seen as a recommendation. However, for individual objects suitability tests (individual tests) may be necessary as the whole system design has to be considered. All substrates must be free from material which may affect adhesion (grease, separating agents, loose talcum etc. - also refer to Technical Information TI 21). You can request information on primers that are not specified here from our Technical Hotline on +49 561/8295-5555.

Substrates	KEM- PERTEC AC Primer	KEMCO 1K Primer	KEM- PERTEC EP / EP5 Primer	KEM- PERTEC R Primer	KEM- PERTEC FPO Primer / KEMPER- PLAN Primer	KEMCO POX 2K Primer	KEM- PERTEC Glass Primer	without priming
Flexible bitumen sheeting (V 13, V 60, G 200, PYE (SBS))	–	✓ ^{4,8}	✓	✓	–	✓	–	–
Flexible APP bitumen sheeting	–	•	•	•	–	–	–	–
Asphalt, weathered	–	–	✓	✓	–	–	–	–
Flexible synthetic sheeting (EPDM, PE, PP, PIB)	–	•	•	•	•	–	–	–
Flexible synthetic sheeting (PVC-P, PVC-EVA)	–	✓ ²	•	✓ ²	•	•	–	–
Flexible FPO or TPO synthetic sheeting	–	–	–	–	✓ ²	–	–	–
Plastic elements (PVC-U, PVC-C)	–	•	•	•	•	•	–	–
Plastic elements (HDPE, HDPP, PE-HD, PP-H)	–	–	–	–	•	–	–	–
Board materials (fibre cement, gypsum boards and gypsum fibre-boards)	–	✓ ^{4,8}	✓	–	–	✓	–	–
Clinker, bricks, split tiles, face brick-work (grind surface)	–	✓ ^{4,8}	✓	–	–	✓	–	–
Concrete, screed, plaster (MG P II/III)	–	✓ ^{4,8}	✓	–	–	✓	–	–
Plastic-modified screeds and mortar (PCC)	–	•	✓	–	–	✓	–	–
Bricks and blocks for structural shell (lightweight concrete, sand-lime, concrete, Aerated concrete, pumice stone, etc.)	–	•	✓	–	–	✓	–	–
Tiling - MEK cleaned	–	–	✓	•	–	•	–	–
Glass (non-tempered - uncoated) - MEK cleaned	–	–	✓	•	–	•	✓	–
Zinc, galv. steel	–	✓ ^{2,3,4}	✓ ^{2,3,4}	✓ ²	–	•	–	–
Copper, lead	–	✓ ^{2,3,4}	✓ ²	✓ ²	–	–	–	–
Steel, stainless steels (V2A, V4A), aluminium	–	✓ ^{2,3,4}	✓ ^{2,3}	✓ ^{2,3,4}	–	•	–	–
Open-pored insulating materials (polystyrene, mineral wool, foam glass)	–	–	✓ ^{4,6}	✓ ^{4,6}	–	✓ ^{4,6}	–	–
closed-cell insulating materials (polyurethane etc.)	–	–	✓ ^{4,6}	✓ ^{4,6}	–	✓ ^{4,6}	–	–
wooden boards, plywood, chip-board, OSB	–	–	✓ ⁶	✓ ⁶	–	✓ ⁶	–	–

² Cleaning with KEMCO MEK Cleaning Agent and mechanical pre-treatment (only the area to be sealed) is necessary.

³ In the event of increased requirements mechanical fastening is recommended.

- 4 On this substrate, overlapping of more than 10 cm is required.
- 6 Necessary measures according to relevant and applicable guidelines.
- 8 Observe the technical data sheet KEMCO 1K Primer and the Technical Information TI23 - Solvent-based products.

When using this priming table, the application instructions and technical information of KEMPER SYSTEM must be strictly adhered to. Please observe our warranty clause for application instructions:

Priming recommendation KEMPEROL 1K-SF waterproofing

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suitable = ✓

unsuitable = –

Individual test = •

This table serves as a guidance for planning and execution and should only be seen as a recommendation. However, for individual objects suitability tests (individual tests) may be necessary as the whole system design has to be considered. All substrates must be free from material which may affect adhesion (grease, separating agents, loose talcum etc. - also refer to Technical Information TI 21). You can request information on primers that are not specified here from our Technical Hotline on +49 561/8295-5555.

Substrates	KEM- PERTEC AC Primer	KEMCO 1K Primer	KEM- PERTEC EP / EP5 Primer	KEM- PERTEC R Primer	KEM- PERTEC FPO Primer / KEMPER- PLAN Primer	KEMCO POX 2K Primer	KEM- PERTEC Glass Primer	without priming
Flexible bitumen sheeting (V 13, V 60, G 200, PYE (SBS))	–	–	✓	✓	–	–	–	✓ ^{4,9}
Flexible APP bitumen sheeting	–	–	•	•	–	–	–	•
Asphalt, weathered	–	–	–	–	–	–	–	–
Flexible synthetic sheeting (EPDM, PE, PP, PIB)	–	–	•	•	–	–	–	•
Flexible synthetic sheeting (PVC-P, PVC-EVA)	–	•	•	•	–	–	–	•
Flexible FPO or TPO synthetic sheeting	–	–	–	–	•	–	–	–
Plastic elements (PVC-U, PVC-C)	–	–	•	•	•	–	–	•
Plastic elements (HDPE, HDPP, PE-HD, PP-H)	–	–	•	•	•	–	–	•
Board materials (fibre cement, gypsum boards and gypsum fibre-boards)	–	–	✓	✓ ⁴	–	–	–	✓ ⁴
Clinker, bricks, split tiles, face brick-work (grind surface)	–	–	✓	✓ ⁴	–	–	–	✓ ^{2,4}
Concrete, screed, plaster (MG P II/III)	–	–	✓	–	–	✓	–	✓ ^{4,7}
Plastic-modified screeds and mortar (PCC)	–	–	✓	–	–	–	–	•
Bricks and blocks for structural shell (lightweight concrete, sand-lime, concrete, Aerated concrete, pumice stone, etc.)	–	–	✓	•	–	–	–	✓ ⁴
Tiling - MEK cleaned	–	–	•	•	–	–	–	✓ ^{2,4}
Glass (non-tempered - uncoated) - MEK cleaned	–	–	•	•	–	–	✓	✓ ^{2,4}
Zinc, galv. steel	–	–	✓ ^{2,3,4}	✓ ²	–	–	–	✓ ^{2,3,4}
Copper, lead	–	–	✓ ²	✓ ²	–	–	–	✓ ^{2,3,4}
Steel, stainless steels (V2A, V4A), aluminium	–	–	✓ ^{2,3}	✓ ^{2,3,4}	–	–	–	✓ ^{2,3,4}
Open-pored insulating materials (polystyrene, mineral wool, foam glass)	–	–	✓ ^{4,6}	✓ ^{4,6}	–	–	–	•
closed-cell insulating materials (polyurethane etc.)	–	–	✓ ^{4,6}	✓ ^{4,6}	–	–	–	•
wooden boards, plywood, chip-board, OSB	–	–	✓ ^{4,6}	✓ ^{4,6}	–	–	–	✓ ^{4,6}

2 Cleaning with KEMCO MEK Cleaning Agent and mechanical pre-treatment (only the area to be sealed) is necessary.

3 In the event of increased requirements mechanical fastening is recommended.

4 On this substrate, overlapping of more than 10 cm is required.

6 Necessary measures according to relevant and applicable guidelines.

7 can only be used on substrates where no rising damp is present / on substrates in areas which are not in use
9 Color changes (bleeding) can occur.

When using this priming table, the application instructions and technical information of KEMPER SYSTEM must be strictly adhered to. Please observe our warranty clause for application instructions:

Priming recommendation KEMPEROL LF

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suitable = ✓

unsuitable = –

Individual test = •

This table serves as a guidance for planning and execution and should only be seen as a recommendation. However, for individual objects suitability tests (individual tests) may be necessary as the whole system design has to be considered. All substrates must be free from material which may affect adhesion (grease, separating agents, loose talcum etc. - also refer to Technical Information TI 21). You can request information on primers that are not specified here from our Technical Hotline on +49 561/8295-5555.

Substrates	KEM- PERTEC AC Primer	KEMCO 1K Primer	KEM- PERTEC EP / EP5 Primer	KEM- PERTEC R Primer	KEM- PERTEC FPO Primer / KEMPER- PLAN Primer	KEMCO POX 2K Primer	KEM- PERTEC Glass Primer	without priming
Flexible bitumen sheeting (V 13, V 60, G 200, PYE (SBS))	–	–	•	–	–	✓	–	✓ ⁴
Flexible APP bitumen sheeting	–	–	•	–	–	•	–	•
Asphalt, weathered	–	–	•	–	–	•	–	•
Flexible synthetic sheeting (EPDM, PE, PP, PIB)	–	–	•	–	•	•	–	•
Flexible synthetic sheeting (PVC-P, PVC-EVA)	–	✓ ²	•	–	✓ ²	•	–	✓ ^{2,4}
Flexible FPO or TPO synthetic sheeting	–	–	–	–	✓ ²	–	–	–
Plastic elements (PVC-U, PVC-C)	–	–	•	–	•	•	–	✓ ^{2,4}
Plastic elements (HDPE, HDPP, PE-HD, PP-H)	–	•	•	–	•	•	–	•
Board materials (fibre cement, gypsum boards and gypsum fibre-boards)	–	–	✓	–	–	✓	–	✓ ⁴
Clinker, bricks, split tiles, face brick-work (grind surface)	–	–	✓	–	–	✓	–	✓ ^{2,4}
Concrete, screed, plaster (MG P II/III)	–	–	✓	–	–	✓	–	✓ ^{4,7}
Plastic-modified screeds and mortar (PCC)	–	–	✓	–	–	✓	–	✓ ^{4,7}
Bricks and blocks for structural shell (lightweight concrete, sand-lime, concrete, Aerated concrete, pumice stone, etc.)	–	–	✓	–	–	✓	–	✓ ⁴
Tiling - MEK cleaned	–	–	•	–	–	✓ ²	–	✓ ^{2,4}
Glass (non-tempered - uncoated) - MEK cleaned	–	–	•	–	–	✓ ²	✓	✓ ^{2,4}
Zinc, galv. steel	–	–	•	–	–	✓ ²	–	✓ ^{2,4}
Copper, lead	–	–	✓ ²	–	–	✓ ²	–	✓ ^{2,4}
Steel, stainless steels (V2A, V4A), aluminium	–	–	•	–	–	✓ ²	–	✓ ^{2,4}
Open-pored insulating materials (polystyrene, mineral wool, foam glass)	–	–	•	–	–	•	–	•
closed-cell insulating materials (polyurethane etc.)	–	–	✓ ^{4,6}	–	–	✓	–	•
wooden boards, plywood, chip-board, OSB	–	–	✓ ^{4,6}	–	–	✓ ⁶	–	✓ ^{4,6}

² Cleaning with KEMCO MEK Cleaning Agent and mechanical pre-treatment (only the area to be sealed) is necessary.

⁴ On this substrate, overlapping of more than 10 cm is required.

⁶ Necessary measures according to relevant and applicable guidelines.

⁷ can only be used on substrates where no rising damp is present / on substrates in areas which are not in use

When using this priming table, the application instructions and technical information of KEMPER SYSTEM must be strictly adhered to. Please observe our warranty clause for application instructions:

Priming recommendation KEMPEROL PU Aqua

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suitable = ✓

unsuitable = –

Individual test = •

This table serves as a guidance for planning and execution and should only be seen as a recommendation. However, for individual objects suitability tests (individual tests) may be necessary as the whole system design has to be considered. All substrates must be free from material which may affect adhesion (grease, separating agents, loose talcum etc. - also refer to Technical Information TI 21). You can request information on primers that are not specified here from our Technical Hotline on +49 561/8295-5555.

Substrates	KEM- PERTEC AC Primer	KEMCO 1K Primer	KEM- PERTEC EP / EP5 Primer	KEM- PERTEC R Primer	KEM- PERTEC FPO Primer / KEMPER- PLAN Primer	KEMCO POX 2K Primer	KEM- PERTEC Glass Primer	without priming
Flexible bitumen sheeting (V 13, V 60, G 200, PYE (SBS))	–	–	–	–	–	✓ ⁹	–	✓ ^{4,9}
Flexible APP bitumen sheeting	–	–	–	–	–	•	–	•
Asphalt, weathered	–	–	–	–	–	–	–	–
Flexible synthetic sheeting (EPDM, PE, PP, PIB)	–	–	–	–	–	•	–	•
Flexible synthetic sheeting (PVC-P, PVC-EVA)	–	–	–	–	–	–	–	✓ ^{2,4}
Flexible FPO or TPO synthetic sheeting	–	–	–	–	✓ ²	–	–	–
Plastic elements (PVC-U, PVC-C)	–	–	–	–	•	–	–	✓ ^{2,4}
Plastic elements (HDPE, HDPP, PE-HD, PP-H)	–	–	–	–	•	•	–	•
Board materials (fibre cement, gypsum boards and gypsum fibre-boards)	–	–	–	–	–	✓	–	–
Clinker, bricks, split tiles, face brick-work (grind surface)	–	–	–	–	–	✓ ²	–	–
Concrete, screed, plaster (MG P II/III)	–	–	–	–	–	✓	–	–
Plastic-modified screeds and mortar (PCC)	–	–	–	–	–	✓	–	–
Bricks and blocks for structural shell (lightweight concrete, sand-lime, concrete, Aerated concrete, pumice stone, etc.)	–	–	–	–	–	✓	–	–
Tiling - MEK cleaned	–	–	–	–	–	✓ ²	–	–
Glass (non-tempered - uncoated) - MEK cleaned	–	–	–	–	–	✓ ²	–	–
Zinc, galv. steel	–	–	–	–	–	✓ ²	–	✓ ^{2,3,4}
Copper, lead	–	–	–	–	–	✓ ²	–	✓ ^{2,4}
Steel, stainless steels (V2A, V4A), aluminium	–	–	–	–	–	✓ ²	–	✓ ^{2,4}
closed-cell insulating materials (polyurethane etc.)	–	–	–	–	–	✓	–	–
wooden boards, plywood, chip-board, OSB	–	–	–	–	–	✓ ⁶	–	–

2 Cleaning with KEMCO MEK Cleaning Agent and mechanical pre-treatment (only the area to be sealed) is necessary.

3 In the event of increased requirements mechanical fastening is recommended.

4 On this substrate, overlapping of more than 10 cm is required.

9 Color changes (bleeding) can occur.

When using this priming table, the application instructions and technical information of KEMPER SYSTEM must be strictly adhered to. Please observe our warranty clause for application instructions:

Priming recommendation KEMPEROL AC Speed and KEMPEROL AC Speed+ Sealing

Published: 2021-04-29

suitable = ✓

unsuitable = –

Individual test = •

This table serves as a guidance for planning and execution and should only be seen as a recommendation. However, for individual objects suitability tests (individual tests) may be necessary as the whole system design has to be considered. All substrates must be free from material which may affect adhesion (grease, separating agents, loose talcum etc. - also refer to Technical Information TI 21). You can request information on primers that are not specified here from our Technical Hotline on +49 561/8295-5555.

Substrates	KEM- PERTEC AC Primer	KEMCO 1K Primer	KEM- PERTEC EP / EP5 Primer	KEM- PERTEC R Primer	KEM- PERTEC FPO Primer / KEMPER- PLAN Primer	KEM- PERTEC Glass Primer	without priming
Flexible bitumen sheeting (V 13, V 60, G 200, PYE (SBS))	✓	–	–	–	–	–	✓ ⁴
Flexible APP bitumen sheeting	•	–	–	–	–	–	•
Asphalt, weathered	✓ ⁴	–	–	–	–	–	–
Flexible synthetic sheeting (EPDM, PE, PP, PIB)	•	–	–	–	–	–	•
Flexible synthetic sheeting (PVC-P, PVC-EVA)	✓ ²	–	–	–	–	–	✓ ^{2,4}
Flexible FPO or TPO synthetic sheeting	–	–	–	–	✓ ²	–	–
Plastic elements (PVC-U, PVC-C)	✓ ²	–	–	–	–	–	✓ ^{2,4}
Plastic elements (HDPE, HDPP, PE-HD, PP-H)	•	–	–	–	•	–	–
Board materials (fibre cement, gypsum boards and gypsum fibre-boards)	✓	–	–	–	–	–	–
Clinker, bricks, split tiles, face brick-work (grind surface)	✓ ²	–	–	–	–	–	–
Concrete, screed, plaster (MG P II/III)	✓	–	–	–	–	–	–
Plastic-modified screeds and mortar (PCC)	•	–	–	–	–	–	–
Bricks and blocks for structural shell (lightweight concrete, sand-lime, concrete, Aerated concrete, pumice stone, etc.)	✓	–	–	–	–	–	–
Tiling - MEK cleaned	•	–	–	–	–	–	•
Glass (non-tempered - uncoated) - MEK cleaned	•	–	–	–	–	✓	•
Zinc, galv. steel	✓ ²	–	–	–	–	–	✓ ^{2,4}
Copper, lead	✓ ²	–	–	–	–	–	✓ ^{2,4}
Steel, stainless steels (V2A, V4A), aluminium	✓ ²	–	–	–	–	–	✓ ^{2,4}
Open-pored insulating materials (polystyrene, mineral wool, foam glass)	✓ ⁶	–	–	–	–	–	–
closed-cell insulating materials (polyurethane etc.)	✓ ⁶	–	–	–	–	–	•
wooden boards, plywood, chip-board, OSB	✓ ⁶	–	–	–	–	–	–

2 Cleaning with KEMCO MEK Cleaning Agent and mechanical pre-treatment (only the area to be sealed) is necessary.

4 On this substrate, overlapping of more than 10 cm is required.

6 Necessary measures according to relevant and applicable guidelines.

When using this priming table, the application instructions and technical information of KEMPER SYSTEM must be strictly adhered to. Please observe our warranty clause for application instructions:

Priming recommendation KEMPERDUR AC coating

Published: 2021-04-29

suitable = ✓

unsuitable = –

Individual test = •

This table serves as a guidance for planning and execution and should only be seen as a recommendation. However, for individual objects suitability tests (individual tests) may be necessary as the whole system design has to be considered. All substrates must be free from material which may affect adhesion (grease, separating agents, loose talcum etc. - also refer to Technical Information TI 21). You can request information on primers that are not specified here from our Technical Hotline on +49 561/8295-5555.

Substrates	KEM- PERTEC AC Primer	KEMCO 1K Primer	KEM- PERTEC EP / EP5 Primer	KEM- PERTEC R Primer	KEM- PERTEC FPO Primer / KEMPER- PLAN Primer	KEM- PERTEC Glass Primer	without priming
Asphalt, weathered	✓ ⁴	–	–	–	–	–	–
Plastic elements (PVC-U, PVC-C)	✓ ²	–	–	–	–	–	✓ ^{2,4}
Plastic elements (HDPE, HDPP, PE-HD, PP-H)	•	–	–	–	•	–	–
Board materials (fibre cement, gypsum boards and gypsum fibre-boards)	✓	–	–	–	–	–	–
Clinker, bricks, split tiles, face brick-work (grind surface)	✓	–	–	–	–	–	–
Concrete, screed, plaster (MG P II/III)	✓	–	–	–	–	–	–
Plastic-modified screeds and mortar (PCC)	•	–	–	–	–	–	–
Bricks and blocks for structural shell (lightweight concrete, sand-lime, concrete, Aerated concrete, pumice stone, etc.)	✓	–	–	–	–	–	–
Tiling - MEK cleaned	•	–	–	–	–	–	•
Glass (non-tempered - uncoated) - MEK cleaned	•	–	–	–	–	–	•
Zinc, galv. steel	✓ ²	–	–	–	–	–	✓ ^{2,4}
Copper, lead	✓ ²	–	–	–	–	–	✓ ^{2,4}
Steel, stainless steels (V2A, V4A), aluminium	✓ ²	–	–	–	–	–	✓ ^{2,4}
wooden boards, plywood, chip-board, OSB	✓ ⁶	–	–	–	–	–	–

2 Cleaning with KEMCO MEK Cleaning Agent and mechanical pre-treatment (only the area to be sealed) is necessary.

4 On this substrate, overlapping of more than 10 cm is required.

6 Necessary measures according to relevant and applicable guidelines.

When using this priming table, the application instructions and technical information of KEMPER SYSTEM must be strictly adhered to. Please observe our warranty clause for application instructions:

Priming recommendation KEMPEROL V 210 M waterproofing

Published: 2021-04-29

suitable = ✓

unsuitable = –

Individual test = •

This table serves as a guidance for planning and execution and should only be seen as a recommendation. However, for individual objects suitability tests (individual tests) may be necessary as the whole system design has to be considered. All substrates must be free from material which may affect adhesion (grease, separating agents, loose talcum etc. - also refer to Technical Information TI 21). You can request information on primers that are not specified here from our Technical Hotline on +49 561/8295-5555.

Substrates	KEM- PERTEC AC Primer	KEMCO 1K Primer	KEM- PERTEC EP / EP5 Primer	KEM- PERTEC R Primer	KEM- PERTEC FPO Primer / KEMPER- PLAN Primer	KEM- PERTEC Glass Primer	without priming
Flexible bitumen sheeting (V 13, V 60, G 200, PYE (SBS))	✓	–	✓	✓	–	–	–
Flexible APP bitumen sheeting	•	–	•	•	–	–	–
Asphalt, weathered	✓ ⁴	–	✓ ⁴	✓ ⁴	–	–	–
Flexible synthetic sheeting (EPDM, PE, PP, PIB)	•	–	•	•	–	–	–
Flexible synthetic sheeting (PVC-P, PVC-EVA)	✓ ²	–	•	✓ ²	–	–	–
Flexible FPO or TPO synthetic sheeting	–	–	–	–	✓ ²	–	–
Plastic elements (PVC-U, PVC-C)	•	–	•	✓ ²	–	–	–
Plastic elements (HDPE, HDPP, PE-HD, PP-H)	–	–	–	–	•	–	–
Board materials (fibre cement, gypsum boards and gypsum fibre-boards)	✓	–	✓	✓	–	–	–
Clinker, bricks, split tiles, face brick-work (grind surface)	–	–	✓	–	–	–	–
Concrete, screed, plaster (MG P II/III)	✓	–	✓	–	–	–	–
Plastic-modified screeds and mortar (PCC)	•	–	✓	–	–	–	–
Bricks and blocks for structural shell (lightweight concrete, sand-lime, concrete, Aerated concrete, pumice stone, etc.)	•	–	✓	•	–	–	–
Tiling - MEK cleaned	–	–	✓	•	–	–	•
Glass (non-tempered - uncoated) - MEK cleaned	–	–	✓	•	–	–	•
Zinc, galv. steel	–	–	✓ ^{2,3}	✓ ²	–	–	–
Copper, lead	–	–	✓ ^{2,3}	✓ ²	–	–	–
Steel, stainless steels (V2A, V4A), aluminium	–	–	✓ ^{2,3}	✓ ^{2,3}	–	–	✓ ^{2,3,4}
Open-pored insulating materials (polystyrene, mineral wool, foam glass)	✓ ⁶	–	✓ ^{4,6}	✓ ^{4,6}	–	–	–
closed-cell insulating materials (polyurethane etc.)	✓ ^{4,6}	–	✓ ^{4,6}	✓ ^{4,6}	–	–	–
wooden boards, plywood, chip-board, OSB	✓ ^{4,6}	–	✓ ^{4,6}	✓ ^{4,6}	–	–	–

2 Cleaning with KEMCO MEK Cleaning Agent and mechanical pre-treatment (only the area to be sealed) is necessary.
3 In the event of increased requirements mechanical fastening is recommended.

- 4 On this substrate, overlapping of more than 10 cm is required.
6 Necessary measures according to relevant and applicable guidelines.

When using this priming table, the application instructions and technical information of KEMPER SYSTEM must be strictly adhered to. Please observe our warranty clause for application instructions:

Priming recommendation KEMPEROL BR M Waterproofing

Published: 2021-04-29

suitable = ✓

unsuitable = -

Individual test = •

This table serves as a guidance for planning and execution and should only be seen as a recommendation. However, for individual objects suitability tests (individual tests) may be necessary as the whole system design has to be considered. All substrates must be free from material which may affect adhesion (grease, separating agents, loose talcum etc. - also refer to Technical Information TI 21). You can request information on primers that are not specified here from our Technical Hotline on +49 561/8295-5555.

Substrates	KEM- PERTEC AC Primer	KEMCO 1K Primer	KEM- PERTEC EP / EP5 Primer	KEM- PERTEC R Primer	KEM- PERTEC FPO Primer / KEMPER- PLAN Primer	KEM- PERTEC Glass Primer	without priming
Flexible bitumen sheeting (V 13, V 60, G 200, PYE (SBS))	✓	-	✓	✓	-	-	-
Flexible APP bitumen sheeting	•	-	•	•	-	-	-
Asphalt, weathered	✓ ⁴	-	✓ ⁴	✓ ⁴	-	-	-
Flexible synthetic sheeting (EPDM, PE, PP, PIB)	•	-	•	•	-	-	-
Flexible synthetic sheeting (PVC-P, PVC-EVA)	✓ ²	-	•	✓ ²	-	-	-
Flexible FPO or TPO synthetic sheeting	-	-	-	-	✓ ²	-	-
Plastic elements (PVC-U, PVC-C)	•	-	•	✓ ²	-	-	-
Plastic elements (HDPE, HDPP, PE-HD, PP-H)	-	-	-	-	•	-	-
Board materials (fibre cement, gypsum boards and gypsum fibre-boards)	✓	-	✓	✓	-	-	-
Clinker, bricks, split tiles, face brick-work (grind surface)	-	-	✓	-	-	-	-
Concrete, screed, plaster (MG P II/III)	✓	-	✓	-	-	-	-
Plastic-modified screeds and mortar (PCC)	•	-	✓	-	-	-	-
Bricks and blocks for structural shell (lightweight concrete, sand-lime, concrete, Aerated concrete, pumice stone, etc.)	•	-	✓	•	-	-	-
Tiling - MEK cleaned	-	-	✓	•	-	-	•
Glass (non-tempered - uncoated) - MEK cleaned	-	-	✓	•	-	-	•
Zinc, galv. steel	-	-	✓ ^{2,3}	✓ ²	-	-	-
Copper, lead	-	-	✓ ^{2,3}	✓ ²	-	-	-
Steel, stainless steels (V2A, V4A), aluminium	-	-	✓ ^{2,3}	✓ ^{2,3}	-	-	✓ ^{2,3,4}
Open-pored insulating materials (polystyrene, mineral wool, foam glass)	✓ ⁶	-	✓ ^{4,6}	✓ ^{4,6}	-	-	-
closed-cell insulating materials (polyurethane etc.)	✓ ^{4,6}	-	✓ ^{4,6}	✓ ^{4,6}	-	-	-
wooden boards, plywood, chip-board, OSB	✓ ^{4,6}	-	✓ ^{4,6}	✓ ^{4,6}	-	-	-

2 Cleaning with KEMCO MEK Cleaning Agent and mechanical pre-treatment (only the area to be sealed) is necessary.
3 In the event of increased requirements mechanical fastening is recommended.

- 4 On this substrate, overlapping of more than 10 cm is required.
6 Necessary measures according to relevant and applicable guidelines.

When using this priming table, the application instructions and technical information of KEMPER SYSTEM must be strictly adhered to. Please observe our warranty clause for application instructions:

Priming recommendation KEMPEROL 022 waterproofing

As of 2021-04-29

suitable = ✓

This table serves as a guidance for the contractor and should only be seen as a recommendation. However, for individual objects suitability tests (individual tests) may be necessary as the whole system design has to be considered. All substrates must be free from material which may affect adhesion (grease, separating agents, loose talcum etc. - also refer to Technical Information TI 21). You can request information on primers that are not specified here from our Technical Hotline on +49 561/8295-5555.

Substrates	KEMPERTEC TG Primer	Without priming
PE - PP	Individual test	Individual test
PVC	-	✓ ²
Panel products (fibre cement, gypsum and gypsum fibre board)	-	✓
Gypsum (MG P IV)	✓	-
Plaster (MG P II / III)	✓	-
Clinker, bricks, split tiles, face brickwork (grind surface)	-	✓
Concrete, screeds	-	✓
Plastic-modified screeds and mortar (PCC)	Individual test	Individual test
Stones for structural work (lightweight concrete, calcareous sand, concrete, aerated concrete, pumice, etc.)	-	✓
Glass (not-tempered - uncoated) – cleaned with MEK	-	✓ ^{2,4}
Zinc, galv. Steel	-	✓ ²
Copper, lead	-	✓ ²
Steel, stainless steels (V2A, V4A), aluminium	-	✓ ²
Open-cell insulating materials (polystyrene, rock wool, foam glass)	Separation layer	Separation layer
Closed-cell insulating materials (polyurethane etc.)	-	✓ ^{2a,4}
Wooden boards, plywood, chipboard, OSB	-	✓

² Cleaning with KEMPERTEC® MEK cleaning agent and mechanical pre-treatment (only area to be sealed) necessary.

^{2a} Mechanical pre-treatment (only area to be sealed) necessary.

⁴ On this substrate, overlapping of more than 15 cm is required.

When using this priming table, the application guidelines and technical information of KEMPER SYSTEM must be strictly adhered to. Please observe our warranty clause for technical advice.

Priming recommendation KEMPERDUR TC coating

Published: 2021-04-29

suitable = ✓

unsuitable = –

Individual test = •

This table serves as a guidance for planning and execution and should only be seen as a recommendation. However, for individual objects suitability tests (individual tests) may be necessary as the whole system design has to be considered. All substrates must be free from material which may affect adhesion (grease, separating agents, loose talcum etc. - also refer to Technical Information TI 21). You can request information on primers that are not specified here from our Technical Hotline on +49 561/8295-5555.

Substrates	KEM- PERTEC AC Primer	KEMCO 1K Primer	KEM- PERTEC EP / EP5 Primer	KEM- PERTEC R Primer	KEM- PERTEC FPO Primer / KEMPER- PLAN Primer	KEM- PERTEC Glass Primer	without priming
Asphalt, weathered	–	–			–	–	–
Plastic elements (PVC-U, PVC-C)	•	–	•	•	•	–	•
Plastic elements (HDPE, HDPP, PE-HD, PP-H)	•	–	•	•	•	–	•
Board materials (fibre cement, gypsum boards and gypsum fibre-boards)	•	–	✓	–	–	–	–
Clinker, bricks, split tiles, face brick-work (grind surface)	•	–	✓	–	–	–	–
Concrete, screed, plaster (MG P II/III)	•	–	✓	–	–	–	–
Plastic-modified screeds and mortar (PCC)	–	–	✓	–	–	–	–
Bricks and blocks for structural shell (lightweight concrete, sand-lime, concrete, Aerated concrete, pumice stone, etc.)	–	–	–	–	–	–	–
Tiling - MEK cleaned	–	–	–	–	–	–	–
Glass (non-tempered - uncoated) - MEK cleaned	–	–	–	–	–	–	–
Zinc, galv. steel	–	–	✓ ^{2,4}	✓ ²	–	–	–
Copper, lead	–	–	✓ ²	✓ ²	–	–	–
Steel, stainless steels (V2A, V4A), aluminium	–	–	✓ ^{2,3,4}	✓ ^{2,3,4}	–	–	–
wooden boards, plywood, chip-board, OSB	–	–	✓ ^{4,6}	✓ ^{4,6}	–	–	–

² Cleaning with KEMCO MEK Cleaning Agent and mechanical pre-treatment (only the area to be sealed) is necessary.

³ In the event of increased requirements mechanical fastening is recommended.

⁴ On this substrate, overlapping of more than 10 cm is required.

When using this priming table, the application instructions and technical information of KEMPER SYSTEM must be strictly adhered to. Please observe our warranty clause for application instructions:

KEMPERTEC EP Primer



Uses

- As alkaline protection layer
- For new buildings and repair work
- As a primer of the prepared substrate for KEMPEROL waterproofing
- As bonding agent for trowel-applied filler and repair mortar
- For the preparation of a bonding bridges for KEMCO Decor Stone / Natural Stones combined with the KEMCO NQ 0408 Natural Quartz

Features

- Solvent-free
- Excellent adhesion
- Universal use (see priming recommendations)
- Environmental Declaration in accordance with valid international standards
- 2-component
- High penetration capability
- Resin base: Epoxy resin

Pack sizes

3 * 1,0 kg sachets in a plastic bucket
10 kg in a container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Can be stored unopened in a cool, dry, frost-free place. Use by: see label on pack. At temperatures below 5 °C, crystallisation may occur. This can be reversed by careful heating (40 °C).

Usage guide

Depending on the nature and condition of the substrate:

As priming: at least 0.5 kg/m²

As bonding bridge: at least 0.3 kg/m²

As alkali protection: at least 0.4 kg/m²

Properties

Form	Liquid
Standard colour	Comp. A Blue-transparent Comp. B Yellowish
Workability time *	approx. 25 min
Rainproof after *	approx. 6 h
Can be walked on after *	approx. 16 h
Further coating after*	approx. 16 h

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

CE marking

Component to 1	ETA 03/0025
	ETA 03/0026
	ETA 03/0043
	ETA 03/0044

Application

Preparing the substrate

The substrate must be dry (in concrete, the residual moisture in the upper 2 cm must be < 5 %), sound and free from any material that would hinder adhesion.

(refer to Technical Information TI 21 - Substrate Assessment)

The priming recommendations should be followed.

Prime only when substrate and ambient temperature exceed 10 °C and are declining.

Do not apply during rising temperatures.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

Sachet

Remove the sachet from the aluminium packaging. Knead component A thoroughly. Open the centre seam which divides the two components and mix components A and B.

Knead the sachet rapidly (approx. 1 min.) until you have a homogeneous and streak-free Primer mixture. To prevent mixing errors, the mixture should be placed in another container and re-mixed.

Metal container

KEMPERTEC EP Primer component B must be mixed into component A using a slow-running mixing device until you achieve a homogeneous and streak-free mixture.

Mixing time approx. 2 min; use within 25 min.

To prevent mixing errors, the mixture should be placed in another container and re-mixed. Prime in at least one work step ensuring that all pores are closed off (a second work step might be necessary). Use a nylon roller for spreading and prevent material build-up.

Use as a primer and bonding coat

Apply KEMPERTEC EP Primer until all the pores are closed off and scatter the surface directly with KEMCO NQ 0408 Natural Quartz over the entire layer leaving no gaps (consumption approx. 2 kg/m²).

After approx. 16 hours (depending on weather conditions, such as wind, ambient temperature and humidity) and provided that the primed surface is tack-free and dry, further suitable KEMPER SYSTEM products can be applied.

When used as a bonding coat when subsequently coated with KEMCO Decor Stone / Natural Stones

Apply KEMPERTEC EP Primer until all the pores are closed off and scatter the surface directly with KEMCO NQ 0408 Natural Quartz (consumption approx. 300 g/m²).

After approx. 16 h – when the primed surface is dry and tack-free – KEMCO Decor Stone / Natural Stones can be applied.

Use as a filling compound

Before applying the filling compound, apply KEMPERTEC EP Primer.

To compensate any irregularities in the horizontal between 2 and 6 mm, the KEMPERTEC EP Primer is mixed with KEMPERTEC KR Quartz Sand Mixture in a ratio of approx. 1: 4 and applied to the prepared and primed substrate.

Use as a repair mortar

Before applying repair mortar, apply KEMPERTEC EP Primer.

To compensate any unevenness, shrinkage holes and small eruptions up to 20 mm depth, the KEMPERTEC EP Primer is mixed with the KEMPERTEC KR Quartz Sand Mixture in a ratio of approx. 1: 9.

This ratio may be varied depending on the particular application and the ambient conditions.

Use as alkali protection layer

To protect KEMPEROL waterproofing systems against alkaline media (Technical Information TI 15 - Alkalinity) apply a coat of KEMPERTEC EP Primer (consumption min. 0.4 kg/m²).

Scatter KEMCO NQ 0712 Natural Quartz over the entire, still wet layer leaving no gaps (consumption min. 0.5 kg/m²).

Job interruptions and further coating:

The product KEMPERTEC EP Primer may be left for 4 weeks without waterproofing when it has been scattered with sand in a grain-to-grain contact. In case of an interruption of more than 4 weeks the surface must be primed again.

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 15 - alkalinity
- TI 21 - substrate preparation
- TI 30 - Application of KEMPEROL on vertical surfaces

Important notes

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Do not allow to enter waters, drains or to penetrate the ground.

Not suitable for use in swimming pools!

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Disposal

Comp. A+B	Liquid	EAK 08 04 09
Comp. A+B	cured	EAK 08 04 10

GISCODE

RE1

Issued: Vellmar, 2021-04-29

KEMPERTEC EP5 primer



Uses

- As alkaline protection layer
- For new buildings and repair work
- As a primer of the prepared substrate for KEMPER-OL waterproofing
- As bonding agent for trowel-applied filler and repair mortar
- For the preparation of a bonding bridges for KEMCO Decor Stone / Natural Stones combined with the KEMCO NQ 0408 Natural Quartz

Features

- Solvent-free
- Excellent adhesion
- Can be used at temperatures above +5 °C
- Fast curing
- Environmental Declaration in accordance with valid international standards
- 2-component
- Resin base: Epoxy resin
- Resistant to radon (in combination with KEMPER-OL 2K-PUR waterproofing)

Pack sizes

3 * 1.0 kg sachet in plastic container (transparent)
 3 * 1.0 kg sachet in plastic container (blue-transparent)
 10 kg in metal container (blue-transparent)

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature and condition of the substrate:

As priming: at least 0.5 kg/m²

As bonding bridge: at least 0.3 kg/m²

As alkali protection: at least 0.4 kg/m²

Properties

Form	Liquid
Standard colour	Comp. A Blue-transparent Comp. B Yellowish
Workability time *	approx. 20 min
Rainproof after *	approx. 3 h
Can be walked on after *	approx. 6 h
Further coating after*	approx. 4 h(in junction areas)

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

CE marking

Component to 1	ETA 03/0025
	ETA 03/0026
	ETA 03/0043
	ETA 03/0044

Application

Preparing the substrate

The substrate must be dry (in concrete, the residual moisture in the upper 2 cm must be < 5 %), sound and free from any material that would hinder adhesion.

(refer to Technical Information TI 21 - Substrate Assessment)

The priming recommendations should be followed.

Apply only when substrate and ambient temperatures exceed 5 °C and are declining.

Do not apply during rising temperatures.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

Sachet

Remove the sachet from the aluminium packaging. Knead component A thoroughly. Open the centre seam which divides the two components and mix components A and B.

Knead the sachet rapidly (approx. 1 min.) until you have a homogeneous and streak-free Primer mixture. To prevent mixing errors, the mixture should be placed in another container and re-mixed.

Metal container

KEMPERTEC EP5 primer component B must be mixed into component A using a slow-running mixing device until you achieve a homogeneous and streak-free mixture.

Mixing time approx. 2 min; use within 15 min.

To prevent mixing errors, the mixture should be placed in another container and re-mixed. Prime in at least one work step ensuring that all pores are closed off (a second work step might be necessary). Use a nylon roller for spreading and prevent material build-up.

Use as a primer and bonding coat

Apply KEMPERTEC EP5 primer until all the pores are closed off and scatter the surface directly with KEMCO NQ 0408 Natural Quartz over the entire layer leaving no gaps (consumption approx. 2 kg/m²).

After approx. 4 hours (depending on weather conditions, such as wind, ambient temperature and humidity) and provided that the primed surface is tack-free and dry, further suitable KEMPER SYSTEM products can be applied.

When used as a bonding coat when subsequently coated with KEMCO Decor Stone / Natural Stones

Apply KEMPERTEC EP5 primer until all the pores are closed off and scatter the surface directly with KEMCO NQ 0408 Natural Quartz (consumption approx. 300 g/m²).

After approx. 16 h – when the primed surface is dry and tack-free – KEMCO Decor Stone / Natural Stones can be applied.

Use as a filling compound

Before applying the filling compound, apply KEMPERTEC EP5 primer.

To compensate any irregularities in the horizontal between 2 and 6 mm, the KEMPERTEC EP5 primer is mixed with KEMPERTEC KR Quartz Sand Mixture in a ratio of approx. 1: 2 and applied to the prepared and primed substrate.

Use as a repair mortar

Before applying repair mortar, apply KEMPERTEC EP5 primer.

To compensate any unevenness, shrinkage holes and small eruptions up to 20 mm depth, the KEMPERTEC EP5 primer is mixed with the KEMPERTEC KR Quartz Sand Mixture in a ratio of approx. 1: 5.

This ratio may be varied depending on the particular application and the ambient conditions.

Use as alkali protection layer

To protect KEMPEROL waterproofing systems against alkaline media (Technical Information TI 15 - Alkalinity) apply a coat of KEMPERTEC EP5 primer (consumption min. 0.4 kg/m²).

Scatter KEMCO NQ 0712 Natural Quartz over the entire, still wet layer leaving no gaps (consumption min. 0.5 kg/m²).

The product KEMPERTEC EP Primer may be left for 4 weeks without waterproofing when it has been scattered with sand in a grain-to-grain contact. In case of an interruption of more than 4 weeks the surface must be primed again.

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 15 - alkalinity
- TI 21 - substrate preparation
- TI 30 - Application of KEMPEROL on vertical surfaces

Important notes

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Do not allow to enter waters, drains or to penetrate the ground.

Not suitable for use in swimming pools!

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Disposal

Comp. A+B	Liquid	EAK 08 04 09
Comp. A+B	cured	EAK 08 04 10

GISCODE

RE1

Issued: Vellmar, 2021-04-29

KEMCO POX 2K Primer



Application area

- As a primer for dry and moist ceramic and mineral substrates
- As a primer for stainless steel, aluminium, structural steel and tinplate
- For new buildings and repair work
- Suitable for indoor and outdoor applications
- As filling compound in combination with KEMCO FL Special Filler

Features

- Solvent-free
- 2-component
- Water dilutable
- Permeable to water vapour
- Odourless
- Promotes adhesion
- Can be applied on moist substrates (residual moisture max. 20 %)
- Resin base: Epoxy resin

Pack sizes

7 kg pack

Storage

Store unopened in a cool, frost-free and dry place, see label for use before date.

Store in closed original containers in dry rooms at temperatures between +5°C and +25°C.

Avoid direct sunlight!

Consumption

Depending on the absorbency of the substrate: at least 250 g/m² (if necessary, apply in several working steps).

Properties

Form	Liquid
Standard colour	Silver grey
Workability time*	approx. 45 min.
Can be walked on after*	approx. 12 h
Further coating after*	approx. 12 h

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

Substrates must be dry, firm and free from contaminants which may affect adhesion and must be prepared accordingly.

Mineral substrates must be prepared so that an average adhesive tensile strength of > 1.5 N/mm² and a minimum single value of > 1.0 N/mm² is obtained.

The temperature of the material, ambient air and substrate must be at least +5°C and not above +30°C at a relative air humidity of < 80%.

The product KEMCO POX 2K Primer can also be applied outdoors on slightly moist substrates (max. 20% moisture). A continuous water film must not be present on the surface.

Use as a primer

KEMCO POX 2K Primer component B must be mixed into component A using a slow-running mixing device until you achieve a homogeneous and streak-free mixture. Mixing time approx. 2 minutes.

To prevent mixing errors, the mixture should be placed in another container and re-mixed.

For better workability the material can be diluted with 20% water. Then transfer it to a clean container and mix for approx. another 2 minutes.

Use a nylon roller to work the material quickly and generously until all the pores are closed off reliably. To prevent the material to react prematurely due to heat build-up in the container, the material should be poured on to the substrate, distributed roughly and then worked in using the roller.

Use as filling and levelling compound

Add KEMCO FL Special Filler to the finished mixture in a ratio of 1:1.5 or 1:3. To prevent mixing errors, the mixture should be placed in another container and re-mixed.

Pour mixture onto the substrate, distribute it evenly with a notched or a smoothing trowel and use a spiked roller to remove any air bubbles if necessary.

Highly absorbent or porous substrates should first be primed with KEMCO POX 2K Primer .

Job interruptions and further coating:

Bei einer Standzeit > 4 Wochen muss die Fläche angeschliffen oder mit KEMCO LE Flexo Primer aktiviert werden und noch einmal mit KEMCO POX 2K Primer grundiert werden.

PPE

Personal protective equipment must be worn.

Clean tools immediately after use with water.

Sufficient ventilation is essential to guarantee full curing. Always adhere to relevant rules and regulations.

For further information on application, please refer to the separate technical data sheets and the application instructions.

GISCODE

RE1

Disposal

Comp. A + B	Liquid	EAK 08 04 09
Comp. A + B	cured	EAK 08 04 10

Important note

Two-component polyurethane, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Issued: Vellmar, 2021-04-29

KEMPERTEC AC Primer



Uses

- As a primer and for the structural, permanent bond between substrate and
 - KEMPEROL AC Speed
 - KEMPERDUR AC Park and KEMPERDUR AC Park+
 - KEMPERTEC AC GF Gradient filler and KEMPERTEC AC RM Repair Mortar
 - KEMPEROL V 210 M and KEMPEROL BR M
- As alkaline protection layer
- For new buildings and repair work
- As bonding agent for trowel-applied filler and repair mortar
- Use as a primer according to BASt (Federal Highway Research Institute) (H PMMA:2018), z. B.: Bridge support structure

Features

- Rapid-curing
- Solvent-free
- Excellent adhesion
- 2-component
- Workable at ambient temperatures of up to -5 °C
- Resin base: PMMA

Pack sizes

1 kg (transparent), 5 kg (transparent blue) and 20 kg (transparent blue) container (component A) in combination with KEMPEROL CP catalyst powder (component B), refer to the table for recommended quantities.

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the absorbency of the substrate:

As priming: at least 0.5 kg/m²

As alkali protection: at least 0.4 kg/m²

Usage must not exceed 0,75 g/m², otherwise bulging and flaking can occur!

Properties

Form	comp. A liquid
	Comp. B powder
Standard colour	transparent blue
	blau-transparent
	Transparent
Workability time * (2% KEMPEROL CP catalyst powder)	approx. 11 min
Rainproof after *	approx. 30 min
Can be walked on after *	approx. 30 min
Further coating after*	approx. 30 min

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

CE marking

Component to 1	ETA 03/0025
	ETA 03/0026
	ETA 03/0043
	ETA 03/0044

Curing

Hardening takes place with KEMPEROL CP catalyst powder. The quantity added depends on the temperature.

Temperature [°C]	KEMP. CP cat. powder - quantity [20 g bag] for 1 kg	KEMP. CP cat. powder - quantity [100 g bag] for 5 kg	KEMP. CP cat. powder - quantity [100 g bag] for 20 kg	Pot life in container [min]	Surface cured [min]
-5 °C	2 bags	2 bags	8 bags	40 min	60 min
0 °C	2 bags	2 bags	8 bags	30 min	50 min
+5 °C	2 bags	2 bags	8 bags	20 min	45 min
+10 °C	2 bags	2 bags	8 bags	18 min	30 min
+20 °C	1 bag	1 bag	4 bags	15 min	30 min
+30 °C	1/2 bag	1/2 bag	2 bags	10 min	15 min

Application

Preparing the substrate

The substrate must be dry (in concrete, the residual moisture in the upper 2 cm must be < 5 %), sound and free from any material that would hinder adhesion.

(refer to Technical Information TI 21 - Substrate Assessment)

The priming recommendations should be followed.

Do not apply during rising temperatures.

Please refer to the Technical Information TI 33 – Working at temperatures below +5°C.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

KEMPERTEC AC-Primer may only with KEMPEROL CP catalyst powder may be used. The quantity of the catalyst powder must be adapted to the respective material temperature (see Table Hardening)

Use as a primer

The KEMPERTEC AC-Primer must be immediately processed, after mixing with KEMPEROL CP catalyst powder poured on the surface and evenly distributed. Prime evenly in one operation with a nylon roller or a rubber slider until saturation. When using a rubber slider, it is necessary to roll over the surface again with the perlon roller to avoid material accumulation. The next stage can be started after approx. 30 minutes when the primer surface is no longer tacky.

Use as a filling compound

Before applying the filling compound, apply KEMPERTEC AC-Primer.

To compensate any irregularities in the horizontal between 2 and 6 mm, the KEMPERTEC AC-Primer is mixed with KEMPERTEC KR Quartz Sand Mixture in a ratio of approx. 1: 3 and applied to the prepared and primed substrate.

Use as a repair mortar

Before applying repair mortar, apply KEMPERTEC AC-Primer.

To compensate any unevenness, shrinkage holes and small eruptions up to 20 mm depth, the KEMPERTEC AC-Primer is mixed with the KEMPERTEC KR Quartz Sand Mixture in a ratio of approx. 1: 10. Note that when applying layer thicknesses of more than approx. 2 cm intense heat generation occurs.

This ratio may be varied depending on the particular application and the ambient conditions.

Use as an protective alkaline layer / bonding coat

To protect KEMPEROL waterproofing systems against alkaline media (Technical Information TI 15 - Alkalinity) or to create a bonding coat apply a coat of KEMPERTEC AC Primer (consumption min. 0.4 kg/m²).

Scatter KEMCO NQ 0712 Natural Quartz over the entire, still wet layer leaving no gaps (consumption min. 0.5 kg/m²).

Use as a primer on the bridge support structure

In order to use the primer in a coating system on bridges the instructions for use are binding.

Job interruptions and further coating:

Operations must be completed within the next 8 days, otherwise separation effects may occur. To avoid this separation effect, it is recommended to sand the still fresh KEMPERTEC AC-Primer with KEMCO NQ 0408 Natural Quartz (approx. 2 kg/m²). Otherwise adhesion of subsequent coats cannot be guaranteed and repriming will be necessary.

PPE

Sufficient ventilation is required. The corresponding instructions should be followed. Always wear personal protective equipment (breathing equipment with filter A/P2, protective gloves, safety goggles). We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 21 - substrate preparation
- TI 22 - Application of KEMPEROL/KEMPERDUR AC products
- TI 33 - processing of KEMPEROL AC Speed / AC Speed+ sealings at temperatures below +5°C

Important notes

Flammable vapour/air mixtures may form in areas with inadequate ventilation.

When applying KEMPERTEC AC-Primer explosion protection for working equipment is necessary.

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Do not allow to enter waters, drains or to penetrate the ground.

Not suitable for use in swimming pools!

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Disposal

Liquid	EAK 08 04 09
cured	EAK 08 04 10

GISCODE

RMA10

Issued: Vellmar, 2021-04-29

KEMPERTEC R Primer



Uses

- For new buildings and repair work
- For priming the substrate prepared for KEMPEROL waterproofing systems
- As bonding agent for trowel-applied filler and repair mortar

Features

- Solvent-free
- Excellent adhesion
- Universal use (see priming recommendations)
- Fast curing
- 2-component
- Resin base: Polyurethane resin

Pack sizes

2 * 1,0 kg sachets in a plastic bucket

CE marking

Component to 1	ETA 03/0025
	ETA 03/0026
	ETA 03/0043
	ETA 03/0044

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature of the substrate: at least 0,5 kg/m²

Properties

Form	Liquid
Standard colour	Comp. A
	Cream
	Comp. B
	Dark brown
Workability time *	approx. 8 min
Rainproof after *	approx. 2 h
Can be walked on after *	approx. 2-3 h
Further coating after*	approx. 2-3 h

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

(refer to Technical Information TI 21 - Substrate Assessment)

The priming recommendations should be followed.

Apply only when substrate and ambient temperatures exceed 5 °C and are declining.

Do not apply during rising temperatures.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

Sachet

Remove the sachet from the aluminium packaging. Knead component A thoroughly. Open the centre seam which divides the two components and mix components A and B.

Knead the sachet rapidly (approx. 1 min.) until you have a homogeneous and streak-free Primer mixture. To prevent mixing errors, the mixture should be placed in another container and re-mixed.

Apply the primer evenly with a perlon roller, ensuring complete substrate coverage and avoiding accumulation of material.

Job interruptions and further coating:

After approximately 2-3 hours (depending on weather conditions, such as wind, ambient temperature and humidity) and provided that the primed surface is tack-free and dry, further suitable KEMPER SYSTEM products can be applied.

Separating effects

The subsequent coating should be carried out no later than 8 days after the application of the KEMPERTEC R Primer to the surface. Otherwise it may lead to a separation effect. In order to avoid this separation effect, we recommend to sand the entire surface of the still fresh KEMPERTEC R Primer with KEMCO NQ 0408 Natural Quartz (approx. 2 kg/m²) in a covering way.

Otherwise adhesion of subsequent coats cannot be guaranteed and repriming will be necessary.

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please observe Technical Information TI 21.

Important notes

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Do not allow to enter waters, drains or to penetrate the ground.

Not suitable for use in swimming pools!

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Disposal

Comp. A+B	Liquid	EAK 08 04 09
Comp. A+B	cured	EAK 08 04 10

GISCODE

PU40

Issued: Vellmar, 2021-04-29

KEMCO 1K Primer



Application area

- For priming the substrate prepared for KEMPEROL Waterproofing Systems
- For new buildings and repair work
- To produce a bonding coat for KEMCO Decor Stone / Natural Stones in combination with KEMCO NQ 0408 Natural Quartz

Features

- Promotes adhesion
- 1 part (single component)
- Fast evaporating
- Basis: Isocyanate prepolymers, dissolved in organic solvents

Pack sizes

1 kg and 4 kg

Storage

Store unopened in a cool, frost-free and dry place, see label for use before date.

Consumption

Depending on the absorbency of the substrate: at least 0,15 kg/m².

Properties

Form	Liquid
Colour	transparent yellowish
Workability time*	approx. 20 min
Rainproof after*	approx. 1 h

Can be walked on after* approx. 1 h

Further coating after* approx. 1 h

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Substrates must be dry, firm and free from contaminants which may affect adhesion and must be prepared accordingly.

(refer to Technical Information TI 21 - Substrate Assessment.)

Please make sure to respect the priming recommendations.

Caution: The product KEMCO 1K Primer is not suitable for every substrate.

During application, the surface temperature must be 3K above the dew point. If the temperature falls below the dew point during application, moisture which can negatively affect adhesion may form on the surface (DIN 4108 - 5 Tab. 1).

Application

Prime in one work step ensuring that all pores are closed off. Distribute using a nylon roller to avoid material build-up, as the substrate will otherwise be damaged.

When used as a bonding coat

Apply the primer until all the pores are closed off and scatter the surface directly with KEMCO NQ 0408 Natural Quartz over the entire layer leaving no gaps (consumption approx. 2 kg/m²).

Further suitable KEMPER SYSTEM products can be applied after approx. 4 hours when the primed surface is dry and tack-free.

Job interruptions and further coating:

After approximately 1 hour (depending on weather conditions, such as wind, ambient temperature and humidity) and provided that the primed surface is tack-free and dry, further suitable KEMPER SYSTEM products can be applied. This must be completed within the next 48 hours or separating effects may occur. To prevent this delamination we recommend the still wet KEMCO 1K Primer to be scattered with KEMCO NQ 0408 Natural Quartz (approx. 2 kg/m²). Otherwise, it is necessary to re-prime after 48 hours.

PPE

Personal protective equipment must be worn.

We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please note the following technical information:

- TI 21 – Substrate Assessment
- TI 23 – Solvent-based products

Bituminous substrates easily start to dissolve, therefore material build-up (puddles) must be avoided!

Disposal

Liquid	EAK 08 04 09
cured	EAK 08 04 10

Important note

The safety data sheets, the container labelling and the danger and the safety recommendations on the containers must be complied with during transport, storage and processing; as are the chemical trade association information sheets.

Do not allow to enter waters, waste water or soil.

Not suitable for use in swimming pools!

GISCODE

PU50

Issued: Vellmar, 2021-04-29

KEMPERTEC FPO Primer



Uses

- For new buildings and repair work
- Optimum adhesion between polyolefinic plastics (FPO/TPO) and KEMPEROL waterproofing systems

Features

- Excellent adhesion on FPO sheets
- 1-component
- Quickly drying

Pack sizes

0,75 kg and 4 kg units

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on substrate and temperature: min. 50 g/m². At higher temperatures, make allowances for a higher level of consumption.

Properties

Form	Liquid
Standard colour	Transparent
Workability time *	approx. 5 min
Rainproof after *	approx. 30 min
Can be walked on after *	approx. 30 min
Further coating after*	approx. 30 min

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

(refer to Technical Information TI 21 - Substrate Assessment)

A cleaning with KEMCO MEK Cleaning Agent is necessary!

Warning: KEMPERTEC FPO Primer is not appropriate for every substrate!

This primer is especially developed for polyolefin plastics!

Apply only when substrate and ambient temperatures exceed 5 °C and are declining.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

KEMPERTEC FPO Primer to be applied evenly, in a thin layer over the whole area of the substrate, using a clean cloth. Exchange cloths for new ones several times and ensure that the complete surface is treated.

Job interruptions and further coating:

After 15 - 30 minutes (depending on weather conditions such as wind, humidity and temperature), with a dry and glue-free surface of the applied primer, other suitable KEMPER SYSTEM products (can be KEMPEROL 2K-PUR waterproofing, KEMPEROL 1K-PUR waterproofing, and KEMPEROL AC Speed+) applied. The further coating has to be applied within the next 24 hours or separating effects can occur..

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 21 - substrate preparation
- TI 23 - solvent-based products

Important notes

Individual tests regarding the adhesive tensile strength values on other flexible synthetic sheeting (EPDM, PIB, etc.) are available. Thus, the FPO Primer should only be applied to these kinds of sheeting after consulting KEMPER SYSTEM!

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Do not allow to enter waters, drains or to penetrate the ground.

Not suitable for use in swimming pools!

Disposal

Liquid	EAK 08 04 09
cured	EAK 08 04 10

Issued: Vellmar, 2021-04-29

KEMPERPLAN Primer

Uses

- For new buildings and repair work
- Optimum adhesion between polyolefinic plastics (FPO/TPO) and KEMPEROL waterproofing systems
- As a primer on KEMPERPLAN FPO Membrane F or KEMPERPLAN FPO Membrane S for the waterproofing systems KEMPEROL 2K-PUR, KEMPEROL 1K-PUR, KEMPEROL 1K-SF and KEMPEROL LF

Features

- Excellent adhesion
- 1-component
- Quickly drying

Pack sizes

0.75 kg and 4 kg container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on substrate and temperature: min. 50 g/m². At higher temperatures, make allowances for a higher level of consumption.

Properties

Form	Liquid
Standard colour	Transparent
Workability time *	approx. 5 min
Rainproof after *	approx. 30 min
Can be walked on after *	approx. 30 min
Further coating after*	approx. 30 min

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

A cleaning with KEMCO MEK Cleaning Agent is necessary!

KEMPERPLAN Primer is only suitable as a primer on KEMPERPLAN FPO Membrane F and KEMPERPLAN FPO Membrane S and serves as an adhesion promoter for the subsequent waterproofing systems , , KEMPEROL 1K-SF and KEMPEROL LF.

Apply only when substrate and ambient temperatures exceed 5 °C and are declining.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

Application

KEMPERPLAN Primer to be applied evenly, in a thin layer over the whole area of the substrate, using a clean cloth. Exchange cloths for new ones several times and ensure that the complete surface is treated.

Job interruptions and further coating:

The further coating has to be applied within the next 24 hours or separating effects can occur..

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Important notes

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Do not allow to enter waters, drains or to penetrate the ground.

Not suitable for use in swimming pools!

Disposal

Liquid	EAK 08 04 09
cured	EAK 08 04 10

Issued: Vellmar, 2021-04-29

KEMPERTEC TG Primer



Uses

- For new buildings and repair work
- As a primer of the prepared substrate for KEMPEROL 022
- Primer for mineral substrates such as
 - gypsum
 - lime and lime-cement plaster
 - cement plaster
- As a primer for the KEMPERTEC MA-SF Metal Adhesive

Features

- Excellent adhesion
- Good penetration
- Consolidation of crumbling, chalking and porous substrates
- Reduces absorptive capacity
- Acrylate dispersion

Pack sizes

10 l tin

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

The consumption of KEMPERTEC TG Primer depends on the properties of the substrate and is at least 100 ml/m² for a single priming coat.

Properties

Form	Liquid
------	--------

Standard colour

Milky

Further coating after*

approx. 1-2 h

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

Do not apply during rising temperatures.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

KEMPERTEC TG-Primer can be used straight from the can using a brush or a suitable airless spray diffuser. Avoid ponding of the primer on the substrate. For extremely absorbing substrates we recommend to apply two primer coats, wet-in-wet. This primer cannot be used for plastic, metal or wooden substrates.

PPE

Personal protective equipment should be worn.

We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools with water immediately after use.

Note

Please observe Technical Information TI 21.

Important notes

The applicable "rules of application" in its current version as well as the "standard rules of technology" and the state of the art for the respective task apply during waterproofing production. For chemical resistance, see the Chemical Resistance List A-Z.

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Disposal

Liquid

EAK 08 04 09

GISCODE

M-GF01

Issued: Vellmar, 2021-04-29

KEMPERTEC Glass Primer



Uses

- For new buildings and repair work
- Optimum adhesion between glass and subsequently applied waterproofing systems:
 - KEMPEROL 2K-PUR
 - KEMPEROL 1K-PUR
 - KEMPEROL AC Speed
 - KEMPEROL 1K-SF
 - KEMPEROL V 210 M
 - KEMPEROL LF

Features

- Good adhesion on glass
- 1-component
- Ready for use
- Resin base: Polyisocyanate

Pack size

250 ml bottle

Shelf Life

Store in closed original containers in dry rooms at temperatures between +5°C and +25°C.

Usage guide

Depending on the nature and condition of the substrate : min. 30 g/m²

Properties

Form	Liquid
Colour	black
Workability time*	approx. 2 min.
Cured after*	approx. 15 min
Further coating after *	approx. 30 min.

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

Any coarse soiling on the surface must be removed beforehand. After that, the surface must then be cleaned with KEMCO MEK Cleaning Agent .

Apply only when substrate and ambient temperatures exceed 5 °C and are declining.

Do not apply during rising temperatures.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

Mixing

Shake the KEMPERTEC Glass Primer bottle vigorously for at least 1 minute before you open it, in order to resolve possible deposits in the KEMPERTEC Glass Primer.

Apply KEMPERTEC Glass Primer in one work step, covering the entire surface. Distribute the primer using a brush so as to avoid material build-up.

Job interruptions and further coating:

After 15 - 30 minutes (depending on weather conditions such as wind, humidity and temperature), with a dry and glue-free surface of the applied primer, other suitable KEMPER SYSTEM products (can be KEMPEROL 2K-PUR waterproofing, KEMPEROL 1K-PUR waterproofing, , KEMPEROL V 210 M , KEMPEROL 1K-SF and KEMPEROL LF) applied. The further coating has to be applied within the next 24 hours or separating effects can occur..

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please observe Technical Information TI 21.

Important information

The KEMPERTEC Glass Primer is extremely sensitive to moisture. The bottle has to be closed immediately after use in order to extend the shelf life of the KEMPERTEC Glass Primer.

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application.

Disposal

Liquid	EAK 08 04 09
cured	EAK 08 04 10

GISCODE

PU50

Issued: Vellmar, 2021-04-29

KEMPERTEC MA-SF Metal Adhesive



Uses

- for bonding of metal profiles and common metals (e.g. from copper, aluminium, stainless steel and galvanised steel) to construction materials such as sand-lime bricks, concrete, aerated concrete, clay bricks, perforated bricks, wood, chipboard and OSB panels, KEMPEROL waterproofing systems, polymer bitumen membranes and insulating materials

Features

- UV-resistant
- Cold applied
- Solvent-free
- 1-component
- Ready for use
- Basis: Bituminous emulsion
- Alkali resistant
- Permanently plastic
- Clean, simple and fast application
- Can be applied with a spatula and is non-sagging up to 80°C

Pack sizes

5 kg and 10 kg plastic container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Consumption

Depending on the character of the substrate: min. 1.5 kg/m².

Due to individual technical designs and differing substrates, the quantities needed during application may be higher.

Properties

Colour	black
Workability time*	approx. 30 min
Temperature during application and complete drying***	+5 to + 50°C
Can withstand loads after*	approx. 2 h
Final hardness after *	approx. 14 days

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

*** Temperature, part, installation and ambient temperatures

Application

Preparing the substrate

The substrate must be sufficiently dry, level, firm, frost-free, clean and free from oil, grease, tar, gravel pockets, cracks, dust, dirt, old mortar and any other contamination.

KEMPERTEC MA-SF metal adhesive can be used directly on clean and firm substrates. In case of sandy, extremely absorbent and porous substrates such as perforated bricks (Poroton), old cement or natural stone, loose parts and dust must be removed and the substrate must then be pretreated e.g. with KEMPERTEC TG Primer.

Greater unevenness (>3 mm) should be levelled out with suitable material prior to the application of the KEMPERTEC MA-SF metal adhesive. KEMPEROL waterproofing systems, elastomer membranes and insulating materials must be cleaned, primed with a solvent-free 2-component primer, e.g. with KEMPERTEC EP Primer and scattered with KEMCO NQ 0712 before the metal adhesive can be applied. Before bonding oil, grease and any materials that may hinder adhesion, must be removed from metals and sheet metal using KEMCO MEK Cleaning Agent and the surface of the metal or sheet metal must then be roughened slightly with sandpaper P40 in order to prevent any reduction in adhesion.

Application

The product KEMPERTEC MA-SF Metal Adhesive is ready to use and is taken directly out of the container with a trowel.

Evenly apply the material using the KEMPERTEC professional notched trowel, working lengthwise and in parallel strokes over the entire metal surface that is to be bonded and in the required layer thickness. If parts are to be bonded in sloped (>3°) or vertical areas, further mechanical fixing is required.

If metal is to be bonded to metal, the metal parts must be secured against shifting, e.g. by implementing mechanical fixation. Bonding should be carried out within 30 minutes. Press down the metal profiles thoroughly and evenly.

Take care to apply the metal adhesive over the entire surface. The material should not extend beyond the metal/sheet to be bonded into the visible area, as otherwise yellowish discolouration may occur with subsequent primers, waterproofing products or coatings.

Areas which are not to be bonded should be masked off or protected.

Please observe the data sheet "Kleben in der Klempnertechnik" (Bonding in plumbing).

PPE

Personal protective equipment should be worn.

Important notes

The freshly applied material must be protected against rain, frost and strong sunlight until completely dry.

After removing the metal adhesive, the container has to be carefully closed in order to prevent a skin from forming. Should a skin have formed, remove it before using the material.

Issued: Vellmar, 2021-04-29

KEMPEROL 2K-PUR waterproofing



Uses

- For the waterproofing of surfaces, for connections and details in combination with KEMPEROL Fleece
- As a waterproofing system under tarmac layers
- Suitable for indoor and outdoor applications
- For new buildings and repair work
- Can be applied to practically any substrate

Features

- Odourless
- Cold applied
- Water vapour permeable
- Crack bridging
- Root resistant according to FLL-testing
- Can be walked on for maintenance
- Solvent-free
- UV resistant
- Environmental Declaration in accordance with valid international standards (EPD)
- 2-component
- CE marking
- Resin base: Polyurethane resin
- Resistant to radon (in combination with KEMPERTEC EP5 primer)

Pack size

10 * 1 kg sachets in a box
 2 * 2,5 kg sachets in a plastic bucket
 12,5 kg in a container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

depending on the nature of the substrate: at least 3,0 kg/m² depending on the layer thickness (see Technical Information TI 03 - Layer thicknesses according to regulations).

Properties

Form	Liquid
Standard colour	Yellow-grey Anthracite
Special colours	On request
Workability time	approx. 30 min
Rainproof after	approx. 2 h
Can be walked on after	approx. 16 h
Cured after	approx. 72 h
Further coating after	approx. 16 h
with mastic asphalt after	approx. 16 h
Short term temperature resistance	250 °C

Test results according to ETAG 005

Component to 2	ETA 03/0044
Water vapour diffusion factor μ	~ 3100
Resistance to wind loads	>= 50 kPa
External fire performance	B _{ROOF} (t1) **
Reaction to fire	E ***
Statement to dangerous substances	does not contain any
Working life	W3
Climatic zones	M and S
Imposed loads	P1 to P4
Roof slope	S1 to S4
Lowest surface temperature	TL4
Highest surface temperature	TH4

** Classification in accordance with EN 13501-5

*** Classification in accordance with EN 13501-1.

Application

Preparing the substrate

The substrate must be dry (in concrete, the residual moisture in the upper 2 cm must be < 5 %), sound and free from any material that would hinder adhesion.

On some substrates, no priming of the full surface is necessary. Generally, the priming recommendations for KEMPEROL 2K-PUR Waterproofing have to be observed.

Only apply when the substrate and ambient temperatures are $\geq +5\text{ }^{\circ}\text{C}$.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

Mixing

Sachet

Remove the sachet from the aluminium packaging. Knead component A thoroughly. Open the centre seam which divides the two components and mix components A and B.

Knead the sachet rapidly (approx. 1 min.) until you have a homogeneous and streak-free Waterproofing mixture.

To prevent mixing errors, the mixture should be placed in another container and re-mixed.

At temperatures below $10\text{ }^{\circ}\text{C}$, the KEMPEROL 2K-PUR Speedshot must be added and stirred.

Plastic container

KEMPEROL 2K-PUR Waterproofing component A must be stirred thoroughly. At temperatures below $10\text{ }^{\circ}\text{C}$, the component A of the KEMPEROL 2K-PUR Speedshot for KEMPEROL 2K-PUR Waterproofing must be added and stirred. Add component B to component A and mix until you have a streak-free mixture.

To prevent mixing errors, the mixture should be placed in another container and re-mixed.

Use

Apply approx. 2/3 of KEMPEROL 2K-PUR Waterproofing, roll in the KEMPEROL 165 fleece and embed it using a nylon roller. Ensure the fleece sections have a 5 cm overlap and are free from bubbles. Apply the remaining 1/3 of KEMPEROL 2K-PUR Waterproofing onto the still wet first layer, ensuring saturation.

Connections to door and window elements etc. with a height of $<15\text{ cm}$ (from upper edge of coating) should have at least 5 cm of overlap. Connections and joints to third party products have to be produced with an overlap of at least 10 cm.

The thickness of the membrane needs to meet minimum requirements defined in the European Technical Approval ETA. National regulations must be followed.

Avoid applying the material beyond the area covered by the fleece.

Alkaline protection

The waterproofing provides limited alkaline resistance. Therefore, if a sustained load is expected, apply KEMPERTEC EP Primer, KEMPERTEC EP5 primer or KEMPERTEC AC Primer to the waterproofing and scatter with KEMCO NQ 0712 Natural Quartz (refer to Technical Information TI 15 - Alkalinity).

Job interruptions and further coating:

The time until the next coat can be applied can be shortened by adding KEMPEROL 2K-PUR Speedshot. Interruptions of more than 24 hours up to 14 days: Clean the working area with KEMCO MEK Cleaning Agent. Interruptions of more than 14 days: Sand the surface of the previously coated area with sandpaper (P80-P100).

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 03 - layer thicknesses according to guidelines
- TI 15 - alkalinity
- TI 21 - substrate preparation
- TI 34 - Correct masking of the surface to be treated with KEMPEROL

Important notes

The applicable "rules of application" in its current version as well as the "standard rules of technology" and the state of the art for the respective task apply during waterproofing production. For chemical resistance, see the Chemical Resistance List A-Z.

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Disposal

Comp. A+B	Liquid	EAK 08 04 09
Comp. A+B	cured	EAK 08 04 10

GISCODE

PU40

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KEMPEROL 2K-PUR Speedshot



Uses

- To speed up the reaction of KEMPEROL 2K-PUR waterproofing

Features

- Shortens the setting process of KEMPEROL 2K-PUR waterproofing

Pack sizes

0,9 kg in a plastic bottle with a measuring chamber

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Specifications refer to a quantity of 1 kg KEMPEROL 2K-PUR waterproofing

Temperature*** [°C]		10 ml	20 ml	30 ml
5°C	V*	21 min	15 min	12 min
	W**	6.5 h	5.5 h	5 h
10°C	V*	20 min	12 min	9 min
	W**	5.5 h	4.5 h	3.5 h
15°C	V*	16 min	10 min	7 min
	W**	5 h	3.5 h	3 h
20°C	V*	11 min	7 min	5 min
	W**	3.5 h	2.5 h	2 h
25°C	V*	10 min	6 min	-
	W**	3 h	2 h	-
30°C	V*	7 min	-	-
	W**	-	-	-

Temperature*** [°C]	10 ml	20 ml	30 ml
W**	2 h	-	-

- * Working time
 ** Further coating after
 *** Temperature of KEMPEROL 2K-PUR waterproofing

Specifications refer to a quantity of 2.5 kg KEMPEROL 2K-PUR waterproofing

Temperature*** [°C]		1 Shot (25 ml)	2 Shot (50 ml)	3 Shot (75 ml)
5°C	V*	21 min	15 min	12 min
	W**	6.5 h	5.5 h	5 h
10°C	V*	20 min	12 min	9 min
	W**	5.5 h	4.5 h	3.5 h
15°C	V*	16 min	10 min	7 min
	W**	5 h	3.5 h	3 h
20°C	V*	11 min	7 min	5 min
	W**	3.5 h	2.5 h	2 h
25°C	V*	10 min	6 min	-
	W**	3 h	2 h	-
30°C	V*	7 min	-	-
	W**	2 h	-	-

- * Working time
 ** Further coating after
 *** Temperature of KEMPEROL 2K-PUR waterproofing

Specifications refer to a quantity of 12.5 kg KEMPEROL 2K-PUR waterproofing

Temperature*** [°C]		1 Shot (25 ml)	2 Shot (50 ml)	3 Shot (75 ml)
5°C	V*	-	-	22 min
	W**	-	-	4.5 h
10°C	V*	-	-	22 min
	W**	-	-	4.5 h
20°C	V*	20 min	18 min	-
	W**	7 h	6 h	-

- * Working time
 ** Further coating after
 *** Temperature of KEMPEROL 2K-PUR waterproofing

Properties

Form	Liquid
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- * Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparation

To add the correct dosage of KEMPEROL 2K-PUR Speedshot first screw the blue cap to the measuring chamber of the bottle. Then squeeze the bottle repeatedly until the dosage chamber has filled up to the 25ml line. 25 ml is one shot.

If the ambient temperature is 10°C or lower, it is recommended that you store and mix the components at room temperature.

Sachet

KEMPEROL 2K-PUR waterproofing Mix according to instructions in a kneading bag and then perform the repotting. KEMPEROL 2K-PUR Speedshot mix with a stirring rod or a slowly running stirrer, streak-free into the finished seal KEMPEROL 2K-PUR. Mixing time is approx 1 minute.

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Important notes

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Do not allow to enter waters, drains or to penetrate the ground.

Disposal

Liquid	EWC 07 02 04
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Issued: Vellmar, 2021-04-29

KEMPEROL 1K-PUR waterproofing



Uses

- For the waterproofing of surfaces, for connections and details in combination with KEMPEROL Fleece
- For new buildings and repair work
- Can be applied to practically any substrate

Features

- Cold applied
- Water vapour permeable
- Crack bridging
- Root resistant according to FLL-testing
- Can be walked on for maintenance
- UV resistant
- Environmental Declaration in accordance with valid international standards
- 1-component
- CE marking
- Resin base: Polyurethane resin

Pack sizes

7 kg, 15 kg, 25 kg in a container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

depending on the nature of the substrate: at least 3,4 kg/m² depending on the layer thickness (see Technical Information TI 03 - Layer thicknesses according to regulations).

Properties

Form	Liquid
Standard colour	Pale grey
Special colours	On request
Workability time*	approx. 30 min
Rainproof after*	approx. 60 min
Can be walked on after*	approx. 24 h
Cured after*	approx. 2–3 d
Further coating after*	approx. 3/7 d (siehe Verarbeitung)

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Test results according to ETAG 005

Component to 2	ETA 03/0043
Water vapour diffusion factor μ	~ 2300
Resistance to wind loads	≥ 50 kPa
External fire performance	B _{ROOF} (t1) **
Reaction to fire	E ***
Statement to dangerous substances	does not contain any
Working life	W3
Climatic zones	M and S
Imposed loads	P1 to P4
Roof slope	S1 to S4
Lowest surface temperature	TL4
Highest surface temperature	TH4

** Classification in accordance with EN 13501-5

*** Classification in accordance with EN 13501-1.

Application

Preparing the substrate

The substrate must be dry (in concrete, the residual moisture in the upper 2 cm must be < 5 %), sound and free from any material that would hinder adhesion.

Prior to the application of the KEMPEROL 1K-PUR Waterproofing, prime with KEMPERTEC Primer according to the primer recommendation.

Only apply when the substrate and ambient temperatures are $\geq +5$ °C.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

At temperatures below +10 °C, we recommend to add the KEMPERTEC 1K thinner .

Use

Apply approx. 2/3 of KEMPEROL 1K-PUR Waterproofing , roll in the KEMPEROL 165 fleece and embed it using a nylon roller. Ensure the fleece sections have a 5 cm overlap and are free from bubbles. Apply the remaining 1/3 of KEMPEROL 1K-PUR Waterproofing on to the still wet first layer, ensuring saturation.

Connections to door and window elements etc. with a height of <15 cm (from upper edge of coating) should have at least 5 cm of overlap. Connections and joints to third party products have to be produced with an overlap of at least 10 cm.

The thickness of the membrane needs to meet minimum requirements defined in the European Technical Approval ETA. National regulations must be followed.

Avoid applying the material beyond the area covered by the fleece.

Alkaline protection

The waterproofing provides limited alkaline resistance. Therefore, if a sustained load is expected, apply KEMPERTEC EP Primer, KEMPERTEC EP5 primer or KEMPERTEC AC Primer to the waterproofing and scatter with KEMCO NQ 0712 Natural Quartz (refer to Technical Information TI 15 - Alkalinity).

Job interruptions and further coating:

The KEMPEROL 1K-PUR Waterproofing is after 3 days with KEMPERDUR Deko or KEMCO 1K Primer incl. KEMCO NQ 0712 Natural Quartz as bonding bridge KEMCO Decor Stone / Natural Stones re-coatable, with other suitable KEMPER SYSTEM products after 7 days.

Interruptions of more than 3 up to 14 days: Clean the working area with KEMCO MEK Cleaning Agent.

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 03 - layer thicknesses according to guidelines
- TI 15 - alkalinity
- TI 21 - substrate preparation
- TI 23 - solvent-based products
- TI 34 - Correct masking of the surface to be treated with KEMPEROL

Important notes

The applicable "rules of application" in its current version as well as the "standard rules of technology" and the state of the art for the respective task apply during waterproofing production. For chemical resistance, see the Chemical Resistance List A-Z.

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Disposal

Liquid	EAK 08 04 09
cured	EAK 08 04 10

GISCODE

PU50

Issued: Vellmar, 2021-04-29

KEMPEROL 1K-SF waterproofing



Uses

- For the waterproofing of surfaces, for connections and details in combination with KEMPEROL Fleece
- For new buildings and repair work
- Can be applied to practically any substrate

Features

- Cold applied
- Water vapour permeable
- Crack bridging
- Root resistant according to FLL-testing
- Can be walked on for maintenance
- Solvent-free
- Odourless
- UV resistant
- 1-component
- CE marking
- Based on polyurethane
- Insensitive to moisture
- Alkali resistant

Pack sizes

6,5 kg, 14 kg

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature and condition of the substrate : min. 3,0 kg/m²

Properties

Form	Liquid
Standard colour	Anthracite
	Light grey

Workability time*	approx. 30 min
Rainproof after*	approx. 1 h
Can be walked on after*	approx. 12 h
Cured after*	approx. 1–2 d
Further coating after*	approx. /

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Classes according to EAD 030350-00-0402 (formerly ETAG 005)

Component to 2	ETA 13/0656
Water vapour diffusion factor μ	~ 2100
Resistance to wind loads	≥ 50 kPa for tear-resistant surfaces
External fire performance	B _{ROOF} (t1) **
Reaction to fire	E ***
Statement to dangerous substances	does not contain any
Working life	W3
Climatic zones	M and S
Imposed loads	P1 to P4
Roof slope	S1 to S4
Lowest surface temperature	TL4
Highest surface temperature	TH4

** Classification in accordance with EN 13501-5

*** Classification in accordance with EN 13501-1.

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

No primer is needed for some surfaces, such as concrete and screed surfaces, depending on the load. In case of concrete and screed surfaces, please ensure that there is no rising damp of the surface. Generally, the priming recommendations for KEMPEROL 1K-SF Waterproofing have to be observed.

Only apply when the substrate and ambient temperatures are $\geq +5$ °C.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

Due to the moisture-tolerance of the material, KEMPEROL 1K-SF it can be processed on slightly damp substrates. However, the area must be free of stagnant water.

Use

Apply approx. 2/3 of KEMPEROL 1K-SF Waterproofing, roll in the KEMPEROL 165 fleece and embed it using a nylon roller. Ensure the fleece sections have a 5 cm overlap and are free from bubbles. Apply the remaining 1/3 of KEMPEROL 1K-SF Waterproofing onto the still wet first layer, ensuring saturation.

Connections to door and window elements etc. with a height of <15 cm (from upper edge of coating) should have at least 5 cm of overlap. Connections and joints to third party products have to be produced with an overlap of at least 10 cm.

Avoid applying the material beyond the area covered by the fleece.

Job interruptions and further coating:

Interruptions of less than 24 hours: continue on top of the KEMPEROL 1K-SF Waterproofing system; no preparations necessary. Interruptions of more than 24 hours: Sand the surface of the previously coated area with a grinder and sandpaper (P80-100).

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 21 - substrate preparation
- TI 34 - Correct masking of the surface to be treated with KEMPEROL

Important notes

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Please allow for proper ventilation during and after application/curing.

For outdoor use only.

Disposal

Liquid	EAK 08 04 09
cured	EAK 08 04 10

Issued: Vellmar, 2021-04-29

KEMPEROL AC Speed



Uses

- For the waterproofing of surfaces, for connections and details in combination with KEMPEROL Fleece
- Suitable for outdoor applications
- For new buildings and repair work
- Can be applied to practically any substrate
- For OS10 systems

Features

- Rapid-curing
- Cold applied
- Water vapour permeable
- Crack bridging
- Root resistant according to FLL-testing
- Can be walked on for maintenance
- Solvent-free
- UV resistant
- Environmental Declaration in accordance with valid international standards
- 2-component
- Light-stable
- Workable of ambient temperatures of up to -5 °C
- CE marking
- Resin base: PMMA
- Alkali resistant
- Resistant to resistant

Pack sizes

15 kg container (component A) in conjunction with KEMPEROL CP catalyst powder (component B) Quantity added -see Table Hardening

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

depending on the nature of the substrate: at least 2,5 kg/m² depending on the layer thickness (see Technical Information TI 03 - Layer thicknesses according to regulations).

Properties

Form	comp. A liquid Comp. B powder
Standard colour	Traffic grey
Workability time* (2% KEMPEROL CP catalyst powder)	approx. 20 min
Rainproof after*	approx. 35 min
Can be walked on after*	approx. 35 min
Cured after*	approx. see curing table
Further coating after*	approx. 60 min
Short term temperature resistance	250 °C

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Test results according to ETAG 005

Water vapour diffusion factor μ	~ 6600
Resistance to wind loads	1,6 N/mm ²
External fire performance	B _{ROOF} (t1) **
Reaction to fire	E ***
Statement to dangerous substances	does not contain any
Working life	W3
Climatic zones	M and S
Imposed loads	P1 to P4
Roof slope	S1 to S4
Lowest surface temperature	TL4
Highest surface temperature	TH4

** Classification in accordance with EN 13501-5

*** Classification in accordance with EN 13501-1.

Curing

Hardening takes place with KEMPEROL CP catalyst powder. The quantity added depends on the temperature.

**Table for 15 kg
KEMPEROL AC Speed Waterproofing**

Temperature [°C]	KEMPEROL CP cat. powder - quantity [g]	Pot life in con- tainer [min]	Rainproof / sur- face cured [min]
-5°C	600	60 min	90 min
0°C	600	45 min	80 min
+5°C	600	35 min	70 min
+10°C	600	30 min	60 min
+20°C	300	20 min	35 min
+30°C	150	20 min	30 min

Application

Preparing the substrate

The substrate must be dry (in concrete, the residual moisture in the upper 2 cm must be < 5 %), sound and free from any material that would hinder adhesion.

On some substrates, no priming of the full surface is necessary. Generally, the priming recommendations for KEMPEROL AC Speed Waterproofing have to be observed.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

Preparation

If the ambient temperature is 10°C or lower, it is recommended that you store and mix the components at room temperature.

At temperatures above +25°C, protect the material against direct sunlight.

Mixing

KEMPEROL AC Speed Waterproofing may only with KEMPEROL CP catalyst powder may be used. The quantity of the catalyst powder must be adapted to the respective material temperature (see Table Hardening

Use

The Waterproofing is produced by mixing KEMPEROL CP catalyst powder and KEMPEROL AC Speed Waterproofing and KEMPEROL 165 fleece. Please refer to the instructions for use for further information.

Connections to door and window elements etc. with a height of <15 cm (from upper edge of coating) should have at least 5 cm of overlap. Connections and joints to third party products have to be produced with an overlap of at least 10 cm.

Avoid applying the material beyond the area covered by the fleece.

Job interruptions and further coating:

If the surface of the seal is glue-free, after approx. 60 minutes KEMPERDUR AC coating, KEMPERDUR AC Park, KEMPERDUR AC Park+ or KEMPERDUR AC-Finish are applied.

Before the next coat of KEMPERDUR MT mineral tile adhesive can be applied a bonding coat is necessary.

Interruptions of more than 1 days: Clean the working area with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 21 - substrate preparation
- TI 22 - Application of KEMPEROL/KEMPERDUR AC products
- TI 33 - processing of KEMPEROL AC Speed / AC Speed+ sealings at temperatures below +5°C
- TI 34 - Correct masking of the surface to be treated with KEMPEROL

Important notes

When applying KEMPEROL AC Speed Waterproofing explosion protection for working equipment is necessary.

The applicable "rules of application" in its current version as well as the "standard rules of technology" and the state of the art for the respective task apply during waterproofing production. For chemical resistance, see the Chemical Resistance List A-Z.

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Disposal

Liquid	EAK 08 04 09
cured	EAK 08 04 10

GISCODE

RMA10

Issued: Vellmar, 2021-04-29

KEMPEROL AC Speed+ Sealing



Uses

- As seal in conjunction with KEMPEROL 165 fleece for making connections
- Suitable for outdoor applications
- For new buildings and repair work
- Can be applied to practically any substrate

Features

- Rapid-curing
- Cold applied
- Water vapour permeable
- Crack bridging
- Root resistant according to FLL-testing
- Can be walked on for maintenance
- Solvent-free
- UV resistant
- 2-component
- Light-stable
- Workable of ambient temperatures of up to -5 °C
- CE marking
- Resin base: PMMA
- Alkali resistant

Usage guide

depending on the nature of the substrate: at least 2,5 kg/m² depending on the layer thickness (see Technical Information TI 03 - Layer thicknesses according to regulations).

Pack sizes

10 kg container (component A) in combination with KEMPEROL CP catalyst powder (component B), refer to the Curing Table for recommended quantities.

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Properties

Form	comp. A liquid Comp. B powder
Standard colour	Traffic grey Anthracite
Workability time*	approx. 15 min
Rainproof after*	approx. 35 min
Can be walked on after*	approx. 35 min
Cured after*	approx. see curing table
Further coating after*	approx. 60 min

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Test results according to ETAG 005

Water vapour diffusion factor μ	~ 6600
Resistance to wind loads	1,6 N/mm ²
External fire performance	B _{ROOF(t1)} **
Reaction to fire	E ***
Statement to dangerous substances	does not contain any
Working life	W3
Climatic zones	M and S
Imposed loads	P1 to P4
Roof slope	S1 to S4
Lowest surface temperature	TL4
Highest surface temperature	TH4

** Classification in accordance with EN 13501-5

*** Classification in accordance with EN 13501-1.

Curing

Hardening takes place with KEMPEROL CP catalyst powder. The quantity added depends on the temperature.

Table for 10 kg KEMPEROL AC Speed+ Waterproofing			
Temperature [°C]	KEMP. CP cat. powder - quantity [g]	Pot life in container [min]	Rainproof / surface cured [min]
-5°C	400	60 min	90 min
0°C	400	45 min	80 min
+5°C	400	35 min	70 min
+10°C	400	30 min	60 min
+20°C	200	20 min	35 min
+30°C	100	20 min	30 min

Application

Preparing the substrate

The substrate must be dry (in concrete, the residual moisture in the upper 2 cm must be < 5 %), sound and free from any material that would hinder adhesion.

A primer is not required for all substrates. In general, the priming recommendation for KEMPEROL AC Speed should be considered.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

Preparation

If the ambient temperature is 10°C or lower, it is recommended that you store and mix the components at room temperature.

At temperatures above +25°C, protect the material against direct sunlight.

Mixing

KEMPEROL AC Speed+ Waterproofing may only with KEMPEROL CP catalyst powder may be used. The quantity of the catalyst powder must be adapted to the respective material temperature (see Table Hardening

Use

The Waterproofing is produced by mixing KEMPEROL CP catalyst powder and KEMPEROL AC Speed+ Waterproofing and KEMPEROL 165 fleece.

Connections to door and window elements etc. with a height of <15 cm (from upper edge of coating) should have at least 5 cm of overlap. Connections and joints to third party products have to be produced with an overlap of at least 10 cm.

Avoid applying the material beyond the area covered by the fleece.

Before the next coat of KEMPERDUR MT mineral tile adhesive can be applied a bonding coat is necessary.

Interruptions of more than 1 days: Clean the working area with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 21 - substrate preparation
- TI 22 - Application of KEMPEROL/KEMPERDUR AC products
- TI 33 - processing of KEMPEROL AC Speed / AC Speed+ sealings at temperatures below +5°C
- TI 34 - Correct masking of the surface to be treated with KEMPEROL

Important notes

When applying KEMPEROL AC Speed+ Waterproofing explosion protection for working equipment is necessary.

The applicable "rules of application" in its current version as well as the "standard rules of technology" and the state of the art for the respective task apply during waterproofing production. For chemical resistance, see the Chemical Resistance List A-Z.

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Disposal

Liquid	EAK 08 04 09
cured	EAK 08 04 10

GISCODE

RMA10

Issued: Vellmar, 2021-04-29

KEMPEROL PU Aqua



Uses

- For the waterproofing of surfaces, for connections and details in combination with KEMPEROL Fleece
- As a construction product for the repair of roof and building sealing in connection with KEMPEROL fleece
- For new buildings and repair work
- Can be applied to practically any substrate

Features

- UV-resistant
- Solar reflectance index (SRI value) according ASTM E1980-01: 110
- Thermal Emittance according ASTM C1371-15: 89%
- Degree of solar reflectance according ASTM C1371-15 : 81%
- Cold applied
- Water vapour permeable
- Crack bridging
- Can be walked on for maintenance
- Solvent-free
- 1-component
- Ready for use
- Light-stable

Usage guide

Depending on the nature and condition of the substrate
: min. 2,5 kg/m²

Pack sizes

15 kg in a container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Properties

Form	Liquid
Standard colour	White
Workability time*	approx. 30 min
Rainproof after*	approx. 5 h
Can be walked on after*	approx. 12 h
Cured after*	approx. 1–2 d
Further coating after*	approx. 1 d

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

CE marking

Water vapour diffusion factor μ	~ 2870
External fire performance	B _{ROOF} (t1)
Reaction to fire	E
Useful life	W2
Climatic zones	M and S
Imposed loads	P1 to P4
Roof slope	S1 to S4
Surface temperature min.	TL3
Highest surface temperature	TH4

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

Application only at surface and ambient temperatures of > +10 °C.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

Use

Apply approx. 2/3 of KEMPEROL PU Aqua, roll in the KEMPEROL 165 fleece and embed it using a nylon roller. Ensure the fleece sections have a 5 cm overlap and are free from bubbles. Apply the remaining approx. 1/3 of KEMPEROL PU Aqua onto the still wet first layer, ensuring saturation.

The material, ambient air and substrate temperature must be between min. +10°C at a relative humidity of < 75% and max. +40°C at a relative humidity of < 85% betragen. During application, the surface temperature must be 3 K above the dew point.

Connections to door and window elements etc. with a height of <15 cm (from upper edge of coating) should have at least 5 cm of overlap. Connections and joints to third party products have to be produced with an overlap of at least 10 cm.

Avoid applying the material beyond the area covered by the fleece.

PPE

Personal protective equipment should be worn. Always clean tools immediately after use with water.

Note

Please consider the following technical information:

- TI 21 - substrate preparation
- TI 34 - Correct masking of the surface to be treated with KEMPEROL

Important notes

The BG-Chemie technical data sheets must be observed during application.

Issued: Vellmar, 2021-04-29

KEMPEROL LF



Uses

- For the waterproofing of surfaces, for connections and details in combination with KEMPEROL Fleece
- For new buildings and repair work
- Can be applied to practically any substrate

Features

- Recoatable
- Cold applied
- Water vapour permeable
- Crack bridging
- Can be walked on for maintenance
- Solvent-free
- Odourless
- UV resistant
- Can be used at temperatures above +5 °C
- 1-component
- Contains no plasticisers
- Light-stable
- CE marking
- Resin base: Silane-modified polymer
- Insensitive to moisture
- Free of isocyanates
- Alkali resistant

Pack sizes

6,5 kg, 14 kg

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature and condition of the substrate : min. 3,0 kg/m²

Properties

Form	Liquid
------	--------

Standard colour	Anthracite
Workability time*	approx. 90 min
Rainproof after*	approx. 2 h
Can be walked on after*	approx. 16 h
Cured after*	approx. 16 h**
Further coating after*	approx. 24 h **

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.
** with a layer thickness of 2 mm.

CE marking

External fire performance	B _{ROOF} (t1)
Reaction to fire	E
Useful life	W2
Climatic zones	M and S
Imposed loads	P1 to P4
Roof slope	S1 to S4
Lowest surface temperature	TL4
Highest surface temperature	TH4

Application

Preparing the substrate

The substrate must be sound and free from any material that would hinder adhesion.

No primer is needed for some surfaces, such as concrete and screed surfaces, depending on the load. In case of concrete and screed surfaces, please ensure that there is no rising damp of the surface. Generally, the priming recommendations for KEMPEROL LF have to be observed.

Only apply when the substrate and ambient temperatures are ≥ +5 °C.

Due to the humidity tolerance of the material KEMPEROL LF can be applied to slightly damp substrates. However, the surface must be free of standing water.

When the product is applied the surface temperature must be above the dew point.

Use

Apply approx. 2/3 of KEMPEROL LF, roll in the KEMPEROL 165 fleece using a nylon roller. Ensure the fleece sections have a 5 cm overlap and are free from bubbles. Apply the remaining 1/3 of KEMPEROL LF onto the still wet first layer, ensuring saturation.

Connections to door and window elements etc. with a height of <15 cm (from upper edge of coating) should have at least 5 cm of overlap. Connections and joints to third party products have to be produced with an overlap of at least 10 cm.

Avoid applying the material beyond the area covered by the fleece.

Job interruptions and further coating:

Interruptions of more than 3 up to 14 days: Clean the working area with KEMCO MEK Cleaning Agent.

Interruptions of more than 14 days: Sand the existing working area with sandpaper and clean the working area with KEMCO MEK Cleaning Agent.

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 21 - substrate preparation
- TI 34 - Correct masking of the surface to be treated with KEMPEROL

Important notes

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Please allow for proper ventilation during and after application/curing.

Disposal

Liquid	EAK 08 04 09
cured	EAK 08 04 10

GISCODE

RS

Issued: Vellmar, 2021-04-29

KEMPEROL V 210 M waterproofing



Uses

- Only suitable for outdoor use
- in conjunction with KEMPEROL fleece
- For application of larger areas
- For application under green roofs
- For new buildings and repair work
- Can be applied to practically any substrate

Features

- Long-term proven since 1970
- Cold applied
- Water vapour permeable
- Crack bridging
- Root resistant according to FLL-testing
- Third-party monitoring
- Can be walked on for maintenance
- UV resistant
- 2-component
- CE marking
- Resin base: Polyester resin

Pack sizes

KEMPEROL V 210 M waterproofing:

Component M 19.4 kg / 9.7 kg

KEMPEROL CP catalyst powder Component C 0.6 kg / 0.3 kg

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

KEMPEROL CP catalyst powder should be stored separately.

Usage guide

Depending on the nature of the substrate and depending on the KEMPEROL fleece used: at least 2,8 kg/m² for a layer thickness of approx. 2.0 mm (see Technical Information TI 03 - layer thicknesses, according to the regulations).

Properties

Form	Comp. M liquid Comp. C powder
Standard colour	Grey
Special colours	On request
Workability time*	approx. 15 min
Rainproof after*	approx. 30 min
Can be walked on after*	approx. 6 h
Cured after*	approx. 3 d
Further coating after*	approx. 6 h

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Test results according to ETAG 005

Component to 2	ETA 03/0025
Water vapour diffusion factor μ	~ 10960
Resistance to wind loads	>= 50 kPa
External fire performance	B _{ROOF} (t1) **
Reaction to fire	E ***
Statement to dangerous substances	does not contain any
Working life	W3
Climatic zones	M and S
Imposed loads	P1 to P4
Roof slope	S1 to S4
Lowest surface temperature	TL4
Highest surface temperature	TH4

** Classification in accordance with EN 13501-5

*** Classification in accordance with EN 13501-1.

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

Prior to the application of the KEMPEROL V210 M Waterproofing, prime with KEMPERTEC Primer according to the primer recommendation.

Only apply when the substrate and ambient temperatures are $\geq +5$ °C.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

At ambient temperatures above +25 °C KEMPEROL UP-I inhibitor in the KEMPEROL V210 M Waterproofing component ;M must be added.

KEMPEROL V210 M Waterproofing must be poured into a separate container to carry out mixing. In a mixing ratio of 19.4 kg KEMPEROL V210 M Waterproofing with 0.6 kg KEMPEROL CP catalyst powder Mix the component C intensely (approx. 2 min.).

Use

Apply approx. 2/3 of KEMPEROL V210 M Waterproofing and embed the KEMPEROL Fleece using a nylon roller. Ensure the fleece sections have a 5 cm overlap and are free from bubbles. Apply the remaining approx. 1/3 of KEMPEROL V210 M Waterproofing "fresh-on-fresh" onto the still wet first layer, ensuring saturation.

To avoid premature soiling of the KEMPEROL V210 M Waterproofing, scatter KEMPEROL TP talcum onto the waterproofing after waiting at least 12 hours, distribute it with a fine broom and sweep the surface afterwards.

Connections to door and window elements etc. with a height of <15 cm (from upper edge of coating) should have at least 5 cm of overlap. Connections and joints to third party products have to be produced with an overlap of at least 10 cm.

The thickness of the membrane needs to meet minimum requirements defined in the European Technical Approval ETA. National regulations must be followed.

Avoid applying the material beyond the area covered by the fleece.

Alkaline protection

The waterproofing provides limited alkaline resistance. Therefore, if a sustained load is expected, apply KEMPERTEC AC Primer to the waterproofing and scatter with KEMCO NQ 0712 Natural Quartz (refer to Technical Information TI 15 - Alkalinity).

Job interruptions and further coating:

Interruptions of more than 12 hours: Clean the working area intensively with KEMCO MEK Cleaning Agent.

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 03 - layer thicknesses according to guidelines
- TI 15 - alkalinity

- TI 21 - substrate preparation
- TI 23 - solvent-based products
- TI 34 - Correct masking of the surface to be treated with KEMPEROL

Important notes

The applicable "rules of application" in its current version as well as the "standard rules of technology" and the state of the art for the respective task apply during waterproofing production. For chemical resistance, see the Chemical Resistance List A-Z.

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Disposal

Comp. M	liquid	EWC 08 04 09
Comp. M	cured	EWC 08 04 10
Comp. C	Catalyst powder	EWC 16 05 08

Issued: Vellmar, 2021-04-29

KEMPEROL TP talcum

Uses

- To reduce dirt retention

Composition

Magnesium silicate, powdered, flake shaped

Pack sizes

25 kg bag

Shelf Life

Unlimited when stored in dry conditions.

Usage guide

At least 0,1 kg/m².

Properties

Form	Powder
------	--------

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

CE marking

Component to 2	ETA 03/0025
	ETA 03/0026

Application

KEMPEROL TP Talcum at the earliest after 12 hours, on KEMPEROL V 210 waterproofing should be spread, distributed with a fine broom and swept together. KEMPEROL TP Talcum can be used again in a limited extent.

Important notes

KEMPEROL TP talcum is not subject to specific labelling according to the Ordinance on Hazardous Substances (GefStoffV).

Issued: Vellmar, 2021-04-29

KEMPEROL BR M Waterproofing



Uses

- Only suitable for outdoor use
- in conjunction with KEMPEROL fleece
- For application of larger areas
- As a waterproofing system for concrete structures, concrete roadways under tarmac layers, car parks, bridges, ramps etc.
- For new buildings and repair work
- Can be applied to practically any substrate

Features

- Cold applied
- Water vapour permeable
- Crack bridging
- Third-party monitoring
- BBA-tested liquid waterproofing system
- Can be walked on for maintenance
- UV resistant
- 2-component
- Resin base: Polyester resin

Pack sizes

KEMPEROL BR M Waterproofing,

Component M 19.4 kg

KEMPEROL CP catalyst powder component C 0.6 kg

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

KEMPEROL CP catalyst powder should be stored separately.

Usage guide

Depending on the nature of the substrate and depending on the KEMPEROL fleece used: at least 2,8 kg/m² for a layer thickness of approx. 2.0 mm (see Technical Information TI 03 - layer thicknesses, according to the regulations).

Properties

Form	Comp. M liquid
	Comp. C powder
Standard colour	Translucent
Special colours	On request
Workability time*	approx. 15 min
Rainproof after*	approx. 30 min
Can be walked on after*	approx. 6 h
Ready for vehicular traffic *	approx. 24 h
Cured after*	approx. 3 d**
Further coating after*	approx. 6 h **
with mastic asphalt after	approx. 4–6 h*
Short term temperature resistance	250 °C

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

** valid for joint areas. For installation on the entire surface after 2 d.

CE marking

Component to 2	ETA 03/0026
Water vapour diffusion factor μ	~ 10960
Resistance to wind loads	>= 50 kPa
External fire performance	B _{ROOF} (t1) **
Reaction to fire	E ***
Statement to dangerous substances	does not contain any
Working life	W3
Climatic zones	M and S
Imposed loads	P1 to P4
Roof slope	S1 to S4
Lowest surface temperature	TL4
Highest surface temperature	TH4

** Classification in accordance with EN 13501-5

*** Classification in accordance with EN 13501-1.

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

Prior to the application of the KEMPEROL BR M Waterproofing, prime with KEMPERTEC Primer according to the primer recommendation.

Only apply when the substrate and ambient temperatures are $\geq +5^{\circ}\text{C}$.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

At ambient temperatures above $+25^{\circ}\text{C}$ KEMPEROL UP-I inhibitor in the KEMPEROL BR M Waterproofing component ;M must be added.

KEMPEROL BR M Waterproofing must be poured into a separate container to carry out mixing. In a mixing ratio of 19.4 kg KEMPEROL BR M Waterproofing with 0.6 kg KEMPEROL CP catalyst powder Mix the component C intensely (approx. 2 min.).

Use

Apply approx. 2/3 of KEMPEROL BR M Waterproofing and embed the KEMPEROL Fleece using a nylon roller. Ensure the fleece sections have a 5 cm overlap and are free from bubbles. Apply the remaining approx. 1/3 of KEMPEROL BR M Waterproofing "fresh-on-fresh" onto the still wet first layer, ensuring saturation.

Connections to door and window elements etc. with a height of $<15\text{ cm}$ (from upper edge of coating) should have at least 5 cm of overlap. Connections and joints to third party products have to be produced with an overlap of at least 10 cm.

The thickness of the membrane needs to meet minimum requirements defined in the European Technical Approval ETA. National regulations must be followed.

Avoid applying the material beyond the area covered by the fleece.

Alkaline protection

The waterproofing provides limited alkaline resistance. Therefore, if a sustained load is expected, apply KEMPERTEC EP Primer, KEMPERTEC EP5 primer or KEMPERTEC AC Primer to the waterproofing and scatter with KEMCO NQ 0712 Natural Quartz (refer to Technical Information TI 15 - Alkalinity).

Job interruptions and further coating:

Interruptions of more than 12 hours: Clean the working area intensively with KEMCO MEK Cleaning Agent.

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 03 - layer thicknesses according to guidelines
- TI 15 - alkalinity
- TI 21 - substrate preparation
- TI 23 - solvent-based products
- TI 34 - Correct masking of the surface to be treated with KEMPEROL

Important notes

The applicable "rules of application" in its current version as well as the "standard rules of technology" and the state of the art for the respective task apply during waterproofing production. For chemical resistance, see the Chemical Resistance List A-Z.

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Disposal

Comp. M	liquid	EWC 08 04 09
Comp. M	cured	EWC 08 04 10
Comp. C	Catalyst powder	EWC 16 05 08

Issued: Vellmar, 2021-04-29

KEMPEROL UP-A cold activator



Uses

- For shortening the processing time for the sealings KEMPEROL V 210 M and KEMPEROL BR M at substrate and ambient temperatures between 5°C and 10 °C.

Pack sizes

0,2 kg in a container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

0.2 kg for 20 kg KEMPEROL V 210 M resp. KEMPEROL BR M Sealing.

Properties

Form	Liquid
------	--------

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

CE marking

Component to 2	ETA 03/0025
	ETA 03/0026

Application

KEMPEROL UP-A Cold Activator to be mixed with a stirring stick or slow-running agitator intensively into the resin component until you achieve a homogeneous and

streak-free mixture. In the case of V 210 M and BR M Stir directly into the liquid seal KEMPEROL CP catalyst powder before the is added. Mixing time is approx 1 minute.

If the ambient temperature is 10°C or lower, it is recommended that you store and mix the components at room temperature.

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Important notes

KEMPEROL UP-A Cold Activator is subject to specific labelling according to the Ordinance on Hazardous Substances (GefStoffV).

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Do not allow to enter waters, drains or to penetrate the ground.

Disposal

Cold Activator	liquid	EWC 07 01 04
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Issued: Vellmar, 2021-04-29

KEMPEROL UP-I inhibitor



Uses

- For extension the processing time for the sealings KEMPEROL V 210 M and KEMPEROL BR M at ambient temperatures higher than 25 °C.

Composition

Based on 4-tert-butylcatechol.

Pack sizes

0,3 kg in a container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

0.3 kg for 20 kg KEMPEROL V 210 M resp. KEMPEROL BR M Sealing.

CE marking

Component to 2	ETA 03/0025
	ETA 03/0026

Properties

Form	Liquid
------	--------

Application

KEMPEROL UP-I Inhibitor to be mixed with a stirring stick or slow-running agitator intensively into the resin component until you achieve a homogeneous and streak-free mixture. In the case of V 210 M and BR M Stir directly into the liquid seal KEMPEROL CP catalyst powder before the is added. Mixing time is approx 1 minute.

The storage suitability of component B is not shortened due to the addition of KEMPEROL UP-I inhibitor .

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider Technical Information TI 23 - solvent-based products.

Important notes

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Disposal

Inhibitor	liquid	EWC 07 01 04
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Issued: Vellmar, 2021-04-29

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

KEMPEROL CP catalyst powder



Uses

- Reaction agent (hardener) for hardening the KEMPEROL V 210 M Sealing and KEMPEROL BR M Sealing
- Reaction agent (hardener) for hardening the KEMPEROL AC and KEMPERDUR AC products

Composition

Catalyst based on 50 % dibenzoyl peroxide in stabilizer.

Pack sizes

UP (KEMPEROL V 210 M , KEMPEROL BR M):

0.6 kg plastic bag

PMMA (AC-products):

20 x 20 g plastic bag

10 x 100 g plastic bag

25 kg container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Must be stored separately. Safety instructions on the packaging and the safety data sheets must be observed.

Usage guide

Refer to the technical data sheet of the corresponding product to determine the quantity of catalyst powder to be added.

Properties

Form	Powder
------	--------

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

CE marking

Component to 2	ETA 03/0025
	ETA 03/0026
Component to 1	ETA 03/0025

Component to 4

ETA 03/0026

Application

Mix according to the mixing instructions for the products mentioned above.

Always wear personal protective equipment (breathing equipment with filter A/P2, protective gloves, safety goggles).

Important notes

The BG-Chemie technical data sheets must be observed during application.

Do not allow to enter waters, drains or to penetrate the ground.

Protect against heat and direct sunlight.

Disposal

Catalyst Powder	solid	EWC 16 05 08
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Issued: Vellmar, 2021-04-29

KEMPEROL 022 waterproofing



Uses

- For new buildings and repair work
- As seal in conjunction with KEMPEROL 500 fleece for walls and floors in wet rooms such as
 - House baths
 - Bathrooms in hotels
 - Showers
 - Dishwashing kitchens
 - Washrooms
 - Walks from swimming pools
- Tested according to ETAG 022
- For walls and floors in wet rooms with direct or indirect load and floor drainage

Features

- Load class A according to ETAG 022 (= high-level load)
- Odourless
- Cold applied
- Water vapour permeable
- Bridges 1.5 mm cracks
- Bridges min. 2 mm joints
- Single layer application
- Can be walked on for maintenance
- Solvent-free
- 2-component
- Resin base: Liquid synthetic material

Delivery size

6 kg, 12 kg in sheet steel container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature of the substrate: min. 1,6 kg/m² for a layer thickness of min. 1 mm.

Properties

Form	Liquid
Standard colour	Stone grey
Workability time*	approx. 25 min
Rainproof after*	approx. /
Can be walked on after*	approx. 16 h
Cured after*	approx. 72 h
Further coating after*	approx. 16 h

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

The substrate must be dry (in concrete, the residual moisture in the upper 2 cm must be < 5 %), sound and free from any material that would hinder adhesion.

Substrates must be appropriately pre-treated and absorbent substrates must be primed. Generally, the priming recommendations for KEMPEROL 022 Waterproofing have to be observed.

Application only at surface and ambient temperatures of > +10 °C.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

Mixing

KEMPEROL 022 Waterproofing component A must be stirred thoroughly.

Add component B to component A and mix until you have a streak-free mixture.

To prevent mixing errors, the mixture should be placed in another container and re-mixed.

Use

Apply approx. 2/3 of KEMPEROL 022 Waterproofing, roll in the KEMPEROL 500 fleece and embed it using a nylon roller. Ensure the fleece sections have a 5 cm overlap and are free from bubbles. Apply the remaining approx. 1/3 of KEMPEROL 022 Waterproofing onto the still wet first layer, ensuring saturation. The fresh KEMPEROL 022 Waterproofing is scattered with KEMCO NQ 0408 Natural Quartz with a consumption of 1-1.5 kg/m². The waterproofing does not require a layer protecting against alkalinity.

Connections to door and window elements etc. with a height of <15 cm (from upper edge of coating) should have at least 5 cm of overlap. Connections and joints to third party products have to be produced with an overlap of at least 10 cm.

Penetrations and details must be completely integrated in the surface waterproofing. Alternatively, it is possible to attach sleeves in advance. Tiles can be glued on immediately after the curing of the KEMPEROL 022 Waterproofing with the KEMPERDUR MT mineral tile adhesive.

Avoid applying the material beyond the area covered by the fleece.

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 21 - substrate preparation
- TI 34 - Correct masking of the surface to be treated with KEMPEROL

Important notes

The applicable ETAG 022 in its current version as well as the "standard rules of technology" and the state of the art for the respective task apply during waterproofing production. For chemical resistance, see the Chemical Resistance List A-Z.

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Disposal

Comp. A+B	Liquid	EAK 08 04 09
Comp. A+B	cured	EAK 08 04 10

Issued: Vellmar, 2021-04-29

KEMPEROL FALLSTOP



Uses

- Transparent coating to produce a fall-through protection for conventional new and weathered PMMA, PC, PETG, GRG skylight domes (also suitable for SHE skylight domes) installed professionally on a kerb.

Features

- Fall-through protection to GS Bau 18
- Additionally tested fall-through protection at a surface temperature of the skylight domes of -10°C (based on GS Bau 18 test)
- Only slight reduction of the light transmission level (4.5%)
- High level of elasticity (elongation in accordance with DIN 53504 > 250%)
- UV and weather resistant
- Ready for use
- Warranty of the fall-through protection and increase of the hail resistance class for 5 years; an extension by another 5+5 years is possible (please observe the KEMPEROL FALLSTOP construction site protocol as well as the warranty conditions for this purpose).
- Light-stable
- High level of transparency
- 1-component
- Resin base: Polyurethane resin

Pack sizes

5 kg Container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

1.6 kg/m² The material must be applied evenly in four working steps of at least 400 g/ m². (corresponds to 400 µm on the measuring comb)

Properties

Form	Liquid
Colour	Bluish transparent / glossy
Workability time*	approx. 30 min
Rainproof after*	approx. 4 h
Further coating after*	approx. 4 h
Cured after*	approx. 7 d
Fall-through protection after	approx. 7 d

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

The skylight domes to be coated must be designed to be properly free of defects and professionally mounted on a skylight bas according to the manufacturer's assembly guidelines. Thoroughly clean the skylight with a clean cloth and KEMPERTEC FALLSTOP Cleaner allow to air-drying according to product specifications (see the corresponding Technical information sheet)

In the case of skylights with embrittled or defective sealing lips, the stubborn dirt as well as the old joint residues on the edge of the skylight must first be completely removed. Then the new joint can be filled with the KEMCO GUM Jointing compound filled.

The substrate temperature must be at least 3 K higher than the dew point temperature. Substrate temperature: At least +10°C and relative air humidity: < 80%.

Stir the material carefully and weigh the correct amount for one work step.

Use

Apply the material evenly and without bubbles in a criss-cross fashion using a foam roller. To check the layer thickness repeatedly at various points during application, use the KEMPERTEC® V4A wet film measuring for measuring the layer thickness of the wet film. Due to the shape of skylight domes, go over the material again with a foam roller after initial application, starting at the bottom and working your way upwards, to guarantee an even layer of material and to prevent

runs. Depending on the shape of the skylight domes, if necessary, repeat this procedure again after several minutes to achieve the required layer thickness on all parts of the skylight dome.

Job interruptions and further coating:

In case of work interruptions of more than 7 days, the surface is to be evenly activated with KEMCO LE Flexo Adhesive Primer.

PPE

During application, always wear personal protective equipment including fall protection equipment to BGR 198. Please ensure good and constant ventilation at the workplace during and after application to guarantee even drying.

Always adhere to the KEMPEROL FALLSTOP application instructions. If necessary, a non-destructive before/after ultrasound measurement, can be carried out to determine the layer thickness of KEMPEROL FALLSTOP (e. g. with the measuring device Olympus 38DL Plus). The dry layer thickness of KEMPEROL FALLSTOP must be at least 0.9 mm.

Note

Please consider Technical Information TI 23 - solvent-based products.

Disposal

Liquid	EAK 08 04 09
cured	EAK 08 04 10

GISCODE

PU50

Issued: Vellmar, 2021-04-29

KEMPERTEC FALLSTOP Cleaner



Uses

- Special cleaner for conventional PMMA, PC, PETG, GRP skylight domes

Features

- Low in solvents
- Ready for use
- Fast evaporating
- Cleans intensively and streak-free
- Based on an alcoholic solution

Pack sizes

500 ml spray bottle

Shelf Life

Can be stored cool, frost-free and dry.

Usage guide

According to the level of soiling.

Properties

Form	Liquid
------	--------

Can be coated after*	approx. 15 min
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* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

The skylight domes to be coated must not be damaged (holes, cracks, etc.) and must be mounted on the roof in accordance with the manufacturers' installation guidelines. The processing instructions KEMPEROL

FALLSTOP should be observed KEMPERTEC FALLSTOP Cleaner spray evenly and thinly and rub with a clean cloth or brush. Avoid damaged places Renew the wiping cloths several times. During the processing, personal protective equipment (PPE) should be worn, incl fall protection equipment according to BGR 198.

Important notes

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Disposal

Liquid	EAK 08 04 09
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GISCODE

GGL10

Issued: Vellmar, 2021-04-29

KEMCO GUM Jointing compound



Application area

- For connection and construction joints (up to 20 mm) on wood, plastic, mineral substrates or glass indoors and outdoors

Features

- UV- and weather-resistant
- Ready for use
- Strong adhesive
- Elastic
- Suitable to receive a further coat of KEMPEROL
- Suitable to receive paint and coloured surfacing coats
- Resin base: Polyurethane resin

Pack sizes

310 ml cartridges
12 cartridges / carton

Storage

Avoid direct sunlight and frost!

See label for use before date.

Store in closed original containers in dry rooms at temperatures between +5°C and +25°C.

Allow the material to stabilize to between +18°C and +20°C for at least 24 hours prior to use.

See label for use before date.

Consumption

min. 310 ml / 3 mm (joint width 1x1 cm)

Properties

Colour	Grey
Cured after *	approx. 1 d

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Substrates must be dry, firm and free from contaminants which may affect adhesion and must be prepared accordingly.

The material, ambient air and substrate temperature must be between min. +5°C and max. +30°C at a relative humidity of < 80%. During application, the surface temperature must be 3 K above the dew point.

Bei porösen Untergründen, wie Beton, Estrich, Gasbetonsteinen, Holzwerkstoffen etc, muss vor der Verarbeitung von KEMCO GUM Jointing compound mit KEMCO 1K Primer, KEMCO POX 2K Primer oder KEMPERTEC EP-/EP5 Primer grundiert werden.

Remove the aluminum cover. Pierce the protective membrane in the upper threaded part over its entire surface. Now unscrew the plastic nozzle and cut off diagonally, depending on the desired application thickness. Use the cartridge in the hand gun and in the compressed air gun (2-4 bar). Before starting the work, it is essential to check the joints to be filled, for their suitability and eliminate any possible causes of deficiencies. Trapped moisture can cause blistering and detaching. KEMCO GUM Jointing compound may only have a 2-flank adhesion during processing. Avoid a three-point adhesion by filling the joint with backfill material (z.B. PE round rubber cord).

Personal protective equipment must be worn.

GISCODE

PU50

Disposal

Liquid	EAK 08 04 09
cured	EAK 08 04 10

Issued: Vellmar, 2021-04-29

KEMCO LE Flexo Adhesive Primer



Application area

- Acts as an activator for KEMPEROL FALLSTOP in case of work interruptions > 7 d

Features

- Lightfast
- Low viscosity
- Transparent
- Low consumption
- 1 part (single component)
- Ready for use
- Resin base: Polyurethane resin

Container size:

1 l container

Storage

Avoid direct sunlight and frost!

Store in closed original containers in dry rooms at temperatures between +5°C and +25°C.

To achieve the best results, it is recommended to store the product at room temperature for approx. 24 hours prior to use.

Opened containers must be sealed air tight and should be used as soon as possible.

See label for use before date.

Material consumption:

at least 50 ml/m²

Properties

Form	Liquid
Colour	Transparent
Cured after *	approx. 60 min
Recoat after *	approx. 1 h to max. 6 h

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Substrates must be dry, firm and free from contaminants which may affect adhesion and must be prepared accordingly.

Application

Use a cloth to apply the material thinly and evenly to the whole area of the substrate

Personal protective equipment must be worn.

Sufficient ventilation is essential to guarantee full curing. Always adhere to relevant rules and regulations.

For further information on application, please refer to the separate technical data sheets and the application instructions.

Important note

Please refer to the respective safety data sheet for hazard warnings, protective measures, hazardous substance classes and correct disposal!

Disposal

Liquid	EAK 08 04 09
cured	EAK 08 04 10

GISCODE

PU50

Issued: Vellmar, 2021-04-29

KEMPEROL RepairFix LF



Uses

- Suitable for indoor and outdoor applications
- For repairing leaks
- On bitumen substrates, metals, synthetic materials (excluding PE/PP), roof tiles and mineral substrates

Features

- Recoatable
- Solvent-free
- Odourless
- 1-component
- Fibre reinforced
- High viscosity
- Ready for immediate use
- Rainproof within minutes
- UV and weather resistant
- Permanently elastic and crack bridging (approx. 2mm)
- Water repellent
- Heat and frost resistant
- Can also be applied in light rain
- Resin base: Silane-modified polymer
- Free of isocyanates
- Silicone-free
- Alkali resistant

Shelf Life

Store in closed original containers in dry rooms at temperatures between +5°C and +25°C.

Avoid direct sunlight!

Pack sizes

1 kg in container

Usage guide

Depending on the character of the substrate: at least 2.0 kg/m²

Properties

Form	high viscosity
Colour	Grey
Workability time *	approx. 30 min
Rainproof after *	approx. 10 min
Can be walked on after *	approx. 16 h
Fully cured after *	approx. 16 h
Further coating after *	approx. 16 h

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature. at a layer thickness of 1.5 mm.

Application

Preparing the substrate

Substrates must be firm and free from any substances that could hinder adhesion.

Smooth substrates must be sanded slightly and cleaned. KEMPEROL RepairFix LF can also be applied when it is raining slightly. Use a towel to remove any standing water from the substrate prior to application.

Due to the humidity tolerance of the material KEMPEROL RepairFix LF can be applied to slightly damp substrates. However, the surface must be free of standing water.

Use

Open the container and stir the material thoroughly and carefully. Apply the material undiluted. KEMPEROL RepairFix LF is applied evenly on the substrate using a brush or a spatula and worked in thoroughly while applying slight pressure. It may be necessary to apply a further coat in the case of extreme loads, vertical surfaces, cracks and uneven surfaces once the first coat has cured.

PPE

Personal protective equipment should be worn.

Disposal

Liquid	EAK 08 04 09
cured	EAK 08 04 10

GISCODE

RS

Issued: Vellmar, 2021-04-29

KEMPEROL Roofpatch



Uses

- For repairing leaks
- For flat and sloping surfaces

Features

- Water vapour permeable
- Crack bridging
- Fleece-reinforced
- Cold applied
- Solvent-free
- UV resistant
- 1-component
- Resin base: Silane-modified polymer

Pack sizes

41 x 27 cm in aluminium bags
5 pieces in a cardboard box

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Properties

Colour	anthracite
Workability time *	approx. 90 min
Rainproof after *	approx. 2 h
Can be walked on after *	approx. 16 h
Cured after*	approx. 16 h

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

Only apply when the substrate and ambient temperatures are $\geq +5$ °C.

On the following substrates, the KEMPEROL Roofpatch can be applied without primer:

Surfaces	No priming
Standard bitumen sheets	+
PVC roof sheets	+
Concrete	+
Wood	+
Screed	+
Resin-modified screed	+
Metal	+

Lay the aluminium bag down flat and use the edge of your hand to spread the material inside the bag evenly. Take the gloves attached to the bag and put them on. Open the bag at the provided tear aid, pull out the KEMPEROL Roofpatch and apply it to the area to be waterproofed. Smooth the material, making sure there are no creases and air bubbles. While still wet, the KEMPEROL Roofpatch can be scattered with slate chips to match the existing roof surface.

PPE

Personal protective equipment should be worn.

Important information

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application.

The BG-Chemie technical data sheets must be observed during application.

Disposal

Liquid	EAK 08 04 09
cured	EAK 08 04 10

Issued: Vellmar, 2021-04-29

KEMPEROL 165 fleece



ETA 03/0025

ETA 03/0026

ETA 03/0043

ETA 03/0044

Application

Use

Apply approx. 2/3 KEMPEROL® Waterproofing to a prepared and pre-treated substrate, immediately roll in the KEMPEROL 165 Fleece without creases and bubbles and press it down. Overlap the individual fleece sections by at least 5 cm. Subsequently apply approx. 1/3 KEMPEROL® waterproofing "fresh-on-fresh" to the embedded KEMPEROL 165 Fleece, ensuring complete saturation, avoid excessive material.

Connections to door and window elements etc. with a height of <15 cm (from upper edge of coating) should have at least 5 cm of overlap. Connections and joints to third party products have to be produced with an overlap of at least 10 cm.

Uses

- For new buildings and repair work
- Reinforcement for KEMPEROL waterproofings

Features

- Easier application due to an improved fleece soaking
- System compatible and adapted to the specific purpose
- Regulates the layer thickness
- Suitable to every shape of the surface
- Based on: polyester

Pack sizes

Rolls

Length in metres: 50

Width in cm: 105 / 70 / 52.5 / 42 / 35 / 26.25 / 21 / 10.5

Properties

Form	solid
Colour	White
Weight [g/m ²]	approx. 165

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Shelf Life

Keep away from dampness, store dry, flat and crease-free.

CE marking

Component to 3

Disposal

Fleece	EWC 04 02 21
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Issued: Vellmar, 2021-04-29

KEMPEROL 500 fleece

Issued: Vellmar, 2021-04-29

Uses

- For new buildings and repair work
- Reinforcement for KEMPEROL 022 waterproofing

Features

- Crack bridging
- System compatible and adapted to the specific purpose
- Regulates the layer thickness
- Suitable to every shape of the surface
- Based on: polyester

Pack sizes

Rolls

Length in metres: 50 - Width in cm: 70

Length in metres: 25 - Width in cm: 15

Shelf Life

Keep away from dampness, store dry, flat and crease-free.

Properties

Form	solid
------	-------

Colour	White
--------	-------

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Use

Apply approx. 1 kg KEMPEROL 022 waterproofing to a prepared and pre-treated substrate, immediately roll in the KEMPEROL 500 Fleece without creases and bubbles and press it down. Overlap the individual fleece sections by 5 cm. Subsequently apply approx. 0.8 kg KEMPEROL 022 waterproofing fresh-in-fresh to the KEMPEROL 500 Fleece, ensuring complete saturation, avoid excessive material.

Connections to door and window elements etc. with a height of <15 cm (from upper edge of coating) should have at least 5 cm of overlap. Connections and joints to third party products have to be produced with an overlap of at least 10 cm.

Disposal

Fleece	EWC 04 02 21
--------	--------------

KEMCO RC Fleece Circles



Application area

- For new buildings and repair work
- Pre-cut segments as additional reinforcement for corners

Features

- System-tested and adapted to the intended purpose
- Excellent adaptability
- Basis: Polyester

Storage

Protect against moisture, store horizontally in a dry place without creases.

Pack sizes

Box with 50 pcs

Application

KEMPEROL Waterproofing is applied to the substrate. The KEMCO RC Fleece Circles are applied as an additional reinforcement and pressed down with a brush. KEMPEROL Waterproofing is applied to the first coat until the fleece is fully saturated. Then the fleece-reinforced waterproofing is applied to the edge and the surface.

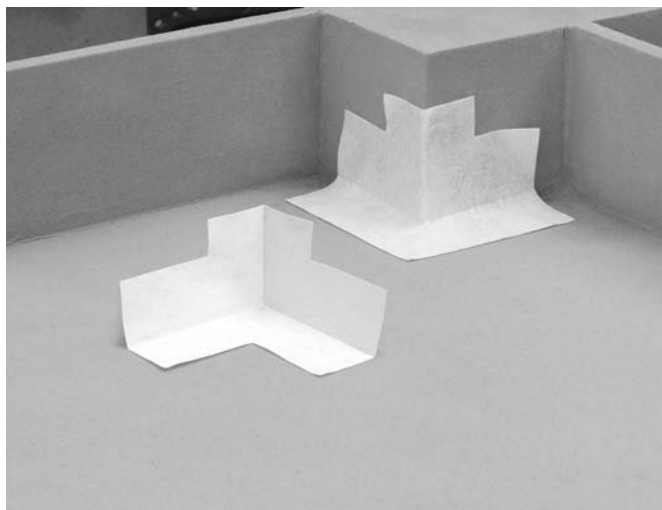
Disposal

Fleece

EAK 04 02 21

Issued: Vellmar, 2021-04-29

KEMCO IC Fleece inner corner and KEMCO OC Fleece outside corner



Uses

- Pre-cuttings as an additional reinforcement for corners

Features

- System compatible and adapted to the specific purpose
- Suitable to every shape of the surface
- Based on: polyester

Shelf Life

Keep away from dampness, store dry, flat and crease-free.

Pack sizes

20 pces in a box

Application

The KEMPREROL waterproofing is applied to the substrate. The KEMCO IC Fleece inner corner or KEMCO OC Fleece outside corner is applied as an additional reinforcement and pressed down with a brush. The KEMPEROL waterproofing is applied to the first coat until the fleece is fully saturated. Then the fleece-reinforced waterproofing is applied to the edge and the surface.

Disposal

Fleece

EWC 04 02 21

Issued: Vellmar, 2021-04-29

KEMCO RS Reinforcement

Application area

- For bridging when butt-jointing the fleece reinforcement
- For creating an even waterproofing surface
- For new buildings and repair work

Features

- Compatible with the system
- Increased tear strength
- Basis: Polyester

Pack sizes

Rolls of 50 m, 15 cm wide

Storage

Protect against moisture, store horizontally in a dry place without creases.

Properties

Colour	white
Weight	approx. 46 g/m ²

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Consumption

Per meter of butt jointed KEMPEROL Fleece 1 m KEMCO RS Reinforcement .

CE marking

Component to 3	ETA 03/0025
	ETA 03/0026
	ETA 03/0043
	ETA 03/0044

Application

KEMCO RS Reinforcement is to be centered over the butt joint when laying KEMPEROL Fleece in a butt jointed way.

Disposal

Reinforcement Strips	EAK 04 02 21
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Issued: Vellmar, 2021-04-29

KEMPERDUR LASI Basic Coating

Uses

- Special coating material for creating a load-securing coating of the loading areas on transport vehicles, in conjunction with the KEMPERDUR LASI Basic Coating KEMPERDUR LASI Filler F0510 Special Spreading or KEMPERDUR LASI Filler R1020 Special Spreading and KEMPERDUR LASI Finish Covering Layer e.g. on
 - truck loading areas
 - Loading bridges
 - Containers
 - Trailers
 - Transporters

Features

- Friction coefficient tested according to EN 12195-1:2011
- Highly abrasion-resistant
- Can support extremely high loads
- Drivable with forklifts and lifting vehicles
- Non-slip in wet conditions
- UV-stable
- Odourless
- Solvent-free
- 2-component
- Resin base: PolyAspartic
- easy to process

Pack sizes

4.5 kg work package contains:

Comp. A 2.7 kg metal bucket

Comp. B 1.8 kg in metal box

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Mixture of component A and B: min. 0.45 kg/m²

Properties

Form	comp. A liquid Comp. B liquid
Colour	Comp. A = ivory comp. B = transparent
Workability time *	approx. 30 min
Rainproof after*	approx. 1 h
Further coating after*	approx. 2 h
Can be walked on after*	approx. 2 h
Cured after*	approx. 16 h

Layer thickness of the finished coating approx. 2.5-3.0 mm

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Friction coefficient tested according to EN 12195-1:2011

KEMPERDUR LASI Coating incl. KEMPERDUR LASI Filler R1020 Special Spreading

Loaded goods: Euro-pallettes*	longitudinally to the pallet runner (dry): $\mu_D = 0.87$	longitudinally to the pallet runner (wet): $\mu_D = 0.83$
	transversely to the pallet runner (dry): $\mu_D = 0.84$	transversely to the pallet runner (dry): $\mu_D = 0.89$

KEMPERDUR LASI Coating incl. KEMPERDUR LASI Filler F0510 Special Spreading

Loaded goods: Euro-pallettes *	longitudinally to the pallet runner (dry): $\mu_D = 0.75$	longitudinally to the pallet runner (wet): $\mu_D = 0.79$
	transversely to the pallet runner (dry): $\mu_D = 0.78$	transversely to the pallet runner (dry): $\mu_D = 0.80$

* Further friction coefficients of various friction partners (e.g. plastic plates, IBC, pallet cage) in connection with our KEMPERDUR LASI coating can be found in the test certificates of DEKRA

Processing

Preparation of the substrate

Substrates must be dry, weight-bearing and free of adhesion-reducing substances and must be prepared accordingly.

For this purpose, the screen pressing plates must be swept off with a broom or thoroughly vacuumed with an industrial vacuum cleaner.

In the event of soiling, also clean the screen pressing plates thoroughly KEMCO MEK Cleaning Agent in order to remove the adhesion-reducing substances.

If there are still dust particles on the loading surface, they can be removed with a simple floor wiper and clear water.

The surface must be absolutely dry before processing. Note: An application on damp surfaces shortens the processing time significantly!

When applied on new screen pressing plate, the surface must be roughened by means of a grinding device. To achieve the desired adhesion, the surface must then be thoroughly vacuumed with an industrial vacuum cleaner. If there are still dust particles on the loading surface, they can be removed with a simple floor wiper and clear water. The surface must be dry before processing.

All surfaces or moving parts that are not to be coat-

ed must be masked. Metal struts, metal frames, existing screwed connections or lashing points should be masked, if necessary, to enable a later replacement of individual floor plates or further use of the lashing points.

We recommend an application temperature of +15°C to +35°C.

Mixing

KEMPERDUR LASI Basic Coating Component A must be thoroughly stirred with a slowly rotating stirrer with a helical agitator.

Component B is completely added to component A and mixed in without streaks.

To prevent mixing errors, the mixture should be placed in another container and re-mixed thoroughly. This ensures that both components are well mixed and that the liquid synthetic material will cure correctly.

Application

In order to keep the consumption quantity (comp. A + comp. B = 4.5 kg = approx. 10m²), the surface to be coated should be measured and marked with an adhesive tape on the edge.

The material should be spread on the prepared loading surface by means of a Perlon roll form KEMPER SYSTEM.

Starting at the opposite side of the exit, the material should be rolled up and spread towards the exit.

The material should be processed in cross work** with a consumption of approx. 0,45 kg/m².

Always spread the material over approx. 2-3 m² and immediately scatter the KEMPERDUR LASI Filler R1020 (coarse) or KEMPERDUR LASI Filler F0510 (fine) as a special scattering leaving no gaps and in grain-to-grain contact (consumption approx. 2.5 - 4 kg/m²) into the still wet coating.

Coat the next 2 - 3 m² of the loading surface and immediately spread the corresponding KEMPERDUR LASI filler fully again. Continue in this way until the entire surface has been coated and spread

As long as the spread KEMPERDUR LASI Basic Coating is still liquid, the adhesive tape must be removed from the surfaces to be protected. To enter the still humid area, spiked shoes should be used.

Allow the coated loading surface to get hardened for about 2 hours.

The loose stones must be removed after hardening of the coating with an industrial vacuum cleaner or a broom. After that, mask again with adhesive tape the parts to be protected, such as metal frames, screwed connections or lashing points and start the sealing.

PPE

The personal protective equipment according to the safety data sheet should be worn. Clean the tools immediately after use. KEMCO MEK Cleaning Agent. Clean the hands and rub with a skin-protection cream.

** Cross work = first apply in the longitudinal direction, then crosswise and once again distribute longitudinally without taking up any new material.

Important notes

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained by a competent person for load securing on regular basis (at least every 12 months). Refinishing may be required depending on the level of wear.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Issued: Vellmar, 2021-04-29

KEMPERDUR LASI Filler F0510 Special Spreading

Uses

- Special filler material for creating a load-securing coating of the loading areas on transport vehicles, in conjunction with the KEMPERDUR LASI Basic Coating and KEMPERDUR LASI Finish Covering Layer e.g. on
 - truck loading areas
 - Loading bridges
 - Containers
 - Trailers
 - Transporters

Features

- Friction coefficient tested according to EN 12195-1:2011
- Highly abrasion-resistant
- Can support extremely high loads
- Drivable with forklifts and lifting vehicles
- Non-slip in wet conditions
- Odourless

Pack sizes

25 kg bag

Shelf Life

Can be stored cool, frost-free and dry.

Usage guide

min. 5 kg/m²

Properties

Form	solid
------	-------

Colour	anthracite
--------	------------

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Processing

Mixing

KEMPERDUR LASI Basic Coating Component A must be thoroughly stirred with a slowly rotating stirrer with a helical agitator.

Component B is completely added to component A and mixed in without streaks.

To prevent mixing errors, the mixture should be placed in another container and re-mixed thoroughly. This ensures that both components are well mixed and that the liquid synthetic material will cure correctly.

Application

After on approx. 2 - 3 m² the KEMPERDUR LASI Basic Coating has been dispersed, the KEMPERDUR LASI Filler F0510 (fine), as special spreading, grain-to-grain (consumption approx. 3 kg/m²), must be immediately spread in the still wet coating.

Coat the next 2 - 3 m² of the loading surface and immediately KEMPERDUR LASI Filler F0510 spread fully again. Continue in this way until the entire surface has been coated and spread

As long as the spread KEMPERDUR LASI Basic Coating is still liquid, the adhesive tape must be removed from the surfaces to be protected. To enter the still humid area, spiked shoes should be used.

Allow the coated loading surface to get hardened for about 2 hours.

The loose stones must be removed after hardening of the coating with an industrial vacuum cleaner or a broom. After that, mask again with adhesive tape the parts to be protected, such as metal frames, screwed connections or lashing points and start the sealing.

PPE

The personal protective equipment according to the safety data sheet should be worn. Clean the tools immediately after use. KEMCO MEK Cleaning Agent. Clean the hands and rub with a skin-protection cream.

Important notes

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained by a competent person for load securing on regular basis (at least every 12 months). Refinishing may be required depending on the level of wear.

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KEMPERDUR LASI Filler R1020 Special Spreading

Uses

- Special filler material for creating a load-securing coating of the loading areas on transport vehicles, in conjunction with the KEMPERDUR LASI Basic Coating and KEMPERDUR LASI Finish Covering Layer e.g. on
 - truck loading areas
 - Loading bridges
 - Containers
 - Trailers
 - Transporters

Features

- Friction coefficient tested according to EN 12195-1:2011
- Highly abrasion-resistant
- Can support extremely high loads
- Drivable with forklifts and lifting vehicles
- Non-slip in wet conditions
- Odourless

Pack sizes

25 kg bag

Shelf Life

Can be stored cool, frost-free and dry.

Usage guide

min. 4.0 kg/m²

Properties

Form	solid
------	-------

Colour	anthracite
--------	------------

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Processing

Mixing

KEMPERDUR LASI Basic Coating Component A must be thoroughly stirred with a slowly rotating stirrer with a helical agitator.

Component B is completely added to component A and mixed in without streaks.

To prevent mixing errors, the mixture should be placed in another container and re-mixed thoroughly. This ensures that both components are well mixed and that the liquid synthetic material will cure correctly.

Application

After on approx. 2 - 3 m² the KEMPERDUR LASI Basic Coating has been dispersed, the KEMPERDUR LASI Filler R1020 (coarse), as special spreading, grain-to-grain (consumption approx. 2.5 kg/m²), must be immediately spread in the still wet coating.

Coat the next 2 - 3 m² of the loading surface and immediately KEMPERDUR LASI Filler R1020 spread fully again. Continue in this way until the entire surface has been coated and spread

As long as the spread KEMPERDUR LASI Basic Coating is still liquid, the adhesive tape must be removed from the surfaces to be protected. To enter the still humid area, spiked shoes should be used.

Allow the coated loading surface to get hardened for about 2 hours.

The loose stones must be removed after hardening of the coating with an industrial vacuum cleaner or a broom. After that, mask again with adhesive tape the parts to be protected, such as metal frames, screwed connections or lashing points and start the sealing.

PPE

The personal protective equipment according to the safety data sheet should be worn. Clean the tools immediately after use. KEMCO MEK Cleaning Agent. Clean the hands and rub with a skin-protection cream.

Important notes

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained by a competent person for load securing on regular basis (at least every 12 months). Refinishing may be required depending on the level of wear.

Issued: Vellmar, 2021-04-29

KEMPERDUR LASI Finish Covering Layer

Uses

- Covering layer for creating a load-securing coating of the loading areas on transport vehicles, in conjunction with KEMPERDUR LASI Basic Coating with the special spreading KEMPERDUR LASI Filler F0510 or KEMPERDUR LASI Filler R1020 and KEMPERDUR LASI Finish as covering layer e.g. on
 - truck loading areas
 - Loading bridges
 - Containers
 - Trailers
 - Transporters

Features

- Friction coefficient tested according to EN 12195-1:2011
- Highly abrasion-resistant
- Can support extremely high loads
- Drivable with forklifts and lifting vehicles
- Non-slip in wet conditions
- UV-stable
- Odourless
- Solvent-free
- 2-component
- Cures in contact with atmospheric humidity
- Resin base: PolyAspartic
- Resistant to salt and seawater

Pack sizes

4.5 kg Work packages consisting of:

Comp. A 2.7 kg metal bucket

Comp. B 1.8 kg in metal box

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Mixture of component A and B: min. 0.75 kg/m²

Properties

Form	comp. A liquid Comp. B liquid
Colour	Comp. A = anthracite comp. B = transparent
Workability time *	approx. 30 min
Rainproof after*	approx. 1 h
Can be walked on after*	approx. 2 h
Cured after*	approx. 16 h

Can be loaded after * approx. 24

Layer thickness of the finished coating approx. 2.5-3.0 mm

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Processing

After the application of KEMPERDUR LASI Basic Coating spread with KEMPERDUR LASI filler, it is performed the final coating with KEMPERDUR LASI Finish Covering Layer.

We recommend an application temperature of +15°C to +35°C.

Mixing

KEMPERDUR LASI Finish Component A must be thoroughly stirred with a slowly rotating stirrer with a helical agitator.

Component B is completely added to component A and mixed in without streaks.

To prevent mixing errors, the mixture should be placed in another container and re-mixed thoroughly. This ensures that both components are well mixed and that the liquid synthetic material will cure correctly.

Application

The material is applied to the cured surface (KEMPERDUR LASI Basic Coating scattered with KEMPERDUR LASI Filler) by means of a KEMPER SYSTEM nylon roller.

Starting at the opposite side of the exit, the material should be rolled up towards the exit.

The material should be processed in cross work** with a consumption of approx. 0,75 kg/m².

Let the sealed surface area cure for approx. 16 hours. The surface can withstand heavy loads after 24 hours.

PPE

The personal protective equipment according to the safety data sheet should be worn. Clean the tools immediately after use. KEMCO MEK Cleaning Agent. Clean the hands and rub with a skin-protection cream.

** Cross work = first apply in the longitudinal direction, then crosswise and once again distribute longitudinally without taking up any new material.

Important notes

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained by a competent person for load securing on regular basis (at least every 12 months). Refinishing may be required depending on the level of wear.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

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KEMPERDUR Deko



Uses

- A decorative finish for balconies, terraces and roofs
- To visually enhance and improve cleaning of surfaces
- As a coating for concrete and screed surfaces in outdoor areas
- On KEMPEROL 1K-PUR waterproofing
- On KEMPEROL 2K-PUR waterproofing
- On KEMPERDUR TC coating

Features

- UV-resistant
- Decorative
- Light-stable
- 1-component
- Low in solvents
- Resin base: Polyurethane resin

Pack size

6 kg in a container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature and condition of the substrate
: min. 1,2 kg/m²

Properties

Form	Liquid
Colour	Light grey

Stone grey

Beige

Rainproof after*	approx. 3 h
Can be walked on after*	approx. 3 d
Cured after*	approx. 7 d
Further coating after *	approx. 3 d

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

CE marking

Component to 4	ETA 03/0043
	ETA 03/0044

** Classification in accordance with EN 13501-5
*** Classification in accordance with EN 13501-1.

Application

Preparing the substrate

Concrete must be clean, dry (residual moisture in the upper 2 cm less than 5 %) and sound. Bituminous waterproofings or laitance should be completely removed before waterproofing or coating. The substrate should be prepared in such a way that an adhesive pull strength of > mid-1.0 N/mm² and the smallest individual value > 0.8 N/mm² is achieved. Observe the flatness tolerances defined in DIN 18202. Shrinkage cracks have to be closed. If the coating is applied on a waterproofing membrane, the membrane must adhere to the entire surface.

For a level surface, we recommend to lay the KEMPEROL Sealing butt-joined in combination with the KEMCO RS Reinforcement . The periods mentioned in the technical data sheets of the individual sealing products apply with regard to the suitability for further coating.

Coating requirement

Only apply when the substrate and ambient temperatures exceed +5°C.

The maximum application temperature is 30°C.

In case of temperatures between +10 ° C and +30 ° C, acclimatize the material for 24h before use.

During application, the surface temperature must be 3K above the dew point.

If the temperature falls below the dew point during application, moisture which can negatively affect adhesion may form on the surface (DIN 4108 - 5 Tab.1).

High air humidity (>80%) can affect the surface structure.

- Air humidity: <80%
- Substrate temperature >3K above dew point

- Air temperature >5°C
- Contraction joints and shrinkage cracks must be closed off.

Up to 250 ml of KEMPERTEC 1K thinner can be added to the 6 kg container at temperatures below 10 °C.

Application

For a full-surface coating, the specified KEMPERDUR Deko may have to be applied in two work steps using a nylon roller or a paintbrush.

Only use containers with the same batch number in order to avoid differences in colour over one surface.

To create a more interesting surface finish, KEMPERDUR CL Chips or KEMPERDUR CS Microchips can be worked into the fresh surfacing, which must be sealed with KEMPERDUR Finish.

PPE

For application in enclosed areas ensure there is sufficient ventilation. Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 21 - substrate preparation
- TI 23 - solvent-based products
- TI 24 - cleaning and maintenance
- TI 29 - slip resistance

Important notes

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Do not allow to enter waters, drains or to penetrate the ground.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained on a regular basis. Refinishing may be required depending on the level of wear.

Disposal

Liquid	EAK 08 04 09
cured	EAK 08 04 10

GISCODE

PU50

Issued: Vellmar, 2021-04-29

KEMPERDUR Deko 2K



Uses

- On KEMPEROL 1K-PUR waterproofing
- On KEMPEROL 2K-PUR waterproofing
- On KEMPERDUR TC coating
- To enhance the decorative appeal of balconies, terraces and flat roofs
- As a paint/coating for industrial floors
- As a decorative paint/coating indoors
- As a coating for concrete and screed - indoors and outdoors

Features

- UV-resistant
- Decorative
- Light-stable
- Solvent-free
- Odourless
- 2-component
- Resin base: Polyurethane resin

Pack sizes

6 kg in a container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature of the substrate: at least 1,2 kg/m² for a layer thickness of approx. 0.5 mm.

Properties

Form	Liquid
------	--------

Colour	Light grey
Workability time *	approx. 30 min
Rainproof after*	approx. 3 h
Can be walked on after*	approx. 12 h
Cured after*	approx. 72 h
Further coating after *	approx. 12 h

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

CE marking

Component to 4	ETA 03/0043
	ETA 03/0044

Application

Preparing the substrate

Concrete must be clean, dry (residual moisture in the upper 2 cm less than 5 %) and sound. Bituminous waterproofings or laitance should be completely removed before waterproofing or coating. The substrate should be prepared in such a way that an adhesive pull strength of > mid-1.0 N/mm² and the smallest individual value > 0.8 N/mm² is achieved. Observe the flatness tolerances defined in DIN 18202. Shrinkage cracks have to be closed. If the coating is applied on a waterproofing membrane, the membrane must adhere to the entire surface.

When applying the coating without waterproofing on concrete and screed surfaces indoors and outdoors, priming with KEMPERTEC EP/ EP5 Primer is necessary.

For a level surface, we recommend to lay the KEMPEROL Sealing butt-joined in combination with the KEMCO RS Reinforcement. The periods mentioned in the technical data sheets of the individual sealing products apply with regard to the suitability for further coating.

Coating requirement

Only apply when the substrate and ambient temperatures exceed +5°C.

The maximum application temperature is 30°C.

In case of temperatures between +10 ° C and +30 ° C, acclimatize the material for 24h before use.

The viscosity increases as the temperature drops.

During application, the surface temperature must be 3K above the dew point.

If the temperature falls below the dew point during application, moisture which can negatively affect adhesion may form on the surface (DIN 4108 - 5 Tab.1).

High air humidity (>80%) can affect the surface structure.

- Air humidity: <80%
- Substrate temperature >3K above dew point
- Air temperature >5°C
- Contraction joints and shrinkage cracks must be closed off.

Mixing

Add component B to component A and mix until you have a streak-free mixture.

To prevent mixing errors, the mixture should be placed in another container and re-mixed.

Application

For a full-surface coating, the specified KEMPERDUR Deko 2K may have to be applied in two work steps using a nylon roller or a paintbrush.

Alternatively, apply the coating using a notched trowel.

Only use containers with the same batch number in order to avoid differences in colour over one surface.

To enhance the decorative appeal KEMPERDUR CL Chips or KEMPERDUR CS Microchips can be sprinkled into the still wet finish. If the chips are to be sealed, let the surface dry for at least approx. 24 h before sealing with KEMPERDUR Finish (contains solvent!).

Any unevenness resulting from the substrate cannot be levelled out with KEMPERDUR Deko 2K.

PPE

Personal protective equipment should be worn.

We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools with water immediately after use.

Note

Please consider the following technical information:

- TI 24 - cleaning and maintenance
- TI 29 - slip resistance

Important notes

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Do not allow to enter waters, drains or to penetrate the ground.

Please note that certain media (e. g. rust, copper, petals, red wine, etc.) can, due to contained pigments or antioxidant agents (e.g. in rubber tyres), cause permanent discolouration of the coating which, however, does not impair the protection provided by it.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must

not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained on a regular basis. Refinishing may be required depending on the level of wear.

Disposal

Comp. A+B	Liquid	EAK 08 04 09
Comp. A+B	cured	EAK 08 04 10

GISCODE

PU40

Issued: Vellmar, 2021-04-29

KEMPERDUR HB thick coating



Uses

- For new buildings and repair work
- On KEMPEROL 1K-PUR waterproofing
- On KEMPEROL 2K-PUR waterproofing
- To coat and enhance the decorative appeal of:
 - balconies and terraces
 - walkways and stairways
 - floors in commercial, retail and leisure premises
 - basements, etc.
- As a coating for concrete and screed - indoors and outdoors

Features

- Uniform
- UV-resistant
- Decorative
- Light-stable
- Solvent-free
- 3-component
- Wear-resistant
- Complies to EN 13501-5 (Reaction to fire)
- Resin base: Polyurethane resin
- Special KEMPERDUR quartz mixture as Component C

Pack sizes

15 kg 3-component working unit

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature of the substrate: at least 6 kg/m² for a layer thickness of approx. 3 mm.

Vertical surfaces: KEMPERDUR HB thick coating without quartz sand mixture or KEMPERDUR Deko 2K to be used observe the Technical information sheet of KEMPERDUR Deko 2K!

Properties

Form	comp. A liquid
	Comp. C granular
Colour	Light grey
Workability time *	approx. 30 min
Rainproof after*	approx. 5 h
Can be walked on after*	approx. 24 h
Cured after*	approx. 3–7 d
Further coating after *	approx. 12 h

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

CE marking

Component to 4	ETA 03/0043
	ETA 03/0044

Application

Preparing the substrate

Concrete must be clean, dry (residual moisture in the upper 2 cm less than 5 %) and sound. Bituminous waterproofings or laitance should be completely removed before waterproofing or coating. The substrate should be prepared in such a way that an adhesive pull strength of > mid-1.0 N/mm² and the smallest individual value > 0.8 N/mm² is achieved. Observe the flatness tolerances defined in DIN 18202. Shrinkage cracks have to be closed. If the coating is applied on a waterproofing membrane, the membrane must adhere to the entire surface.

When applying the coating without waterproofing on concrete and screed surfaces indoors and outdoors, priming with KEMPERTEC EP/ EP5 Primer is necessary.

Coating requirement

Only apply when the substrate and ambient temperatures exceed +5°C.

The maximum application temperature is 30°C.

In case of temperatures between +10 °C and +30 °C, acclimatize the material for 24h before use.

The viscosity increases as the temperature drops.

During application, the surface temperature must be 3K above the dew point.

If the temperature falls below the dew point during application, moisture which can negatively affect adhesion may form on the surface (DIN 4108 - 5 Tab.1).

High air humidity (>80%) can affect the surface structure.

- Air humidity: <80%
- Substrate temperature >3K above dew point
- Air temperature >5°C
- Contraction joints and shrinkage cracks must be closed off
- KEMPEROL 1K-PUR waterproofing must be hardened for at least 7 days and must be fully adherent; air pockets and imperfections must be repaired before re-coating.
- KEMPEROL 2K-PUR waterproofing must be hardened for at least 24 hours and must be fully adherent; air pockets and imperfections must be repaired before re-coating.
- A fully bonded, 2 mm profile can be used as an edge finish.

For a level surface, we recommend to lay the KEMPEROL waterproofing butt-joined in combination with the KEMCO RS Reinforcement Strip .

Mixing (for horizontal surfaces, max. 2% slope)

Stir component A, add component B and mix with a slow-running mixing device, then add component C and mix with the slow-running mixing device, pour into a clean container and mix again. At a lesser slope and/or lower temperatures, component C can be reduced by 10 to 20%.

Application

Use a notched trowel (V notch) to distribute the ready-to-use mixture on the surface being coated, a smoothing trowel to ensure a uniform surface appearance and then immediately use a spiked roller to remove any air bubbles. Within the workability time, the product KEMPERDUR CS Microchips or KEMPERDUR CL Chips is blown evenly onto the surface thus produced using a chip gun or sprinkled onto the surface by hand.

PPE

Personal protective equipment should be worn.

We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 24 - cleaning and maintenance
- TI 29 - slip resistance

Important notes

Fresh coatings have to be protected against direct influence of dirt, humidity and water for at least 5 hours.

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Do not allow to enter waters, drains or to penetrate the ground.

Depending on the nature and condition of the substrate, unevenness or overlaps may remain visible after application of the coating. This can be prevented by a higher level of consumption of the coating product, which has to be factored in.

Please note that certain media (e. g. rust, copper, petals, red wine, etc.) can, due to contained pigments or antioxidant agents (e.g. in rubber tyres), cause permanent discolouration of the coating which, however, does not impair the protection provided by it.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained on a regular basis. Refinishing may be required depending on the level of wear.

Disposal

Liquid	EAK 08 04 09
cured	EAK 08 04 10

GISCODE

PU40

Issued: Vellmar, 2021-04-29

KEMPERDUR TC coating



Uses

- On KEMPEROL 1K-PUR waterproofing
- On KEMPEROL 2K-PUR waterproofing
- As a wearing surface
- On sound and dry substrates (e. g. screed, concrete, etc.)
- For the coating of:
 - parking decks, driveways, courtyards and ramps
 - balconies, terraces and covered walkways
 - shop floors, halls and basements

Features

- Odourless
- Solvent-free
- 3-component
- Can be walked on after a very short time
- Self-levelling
- Wear-resistant
- Long-term resistant
- Not colour stable
- Resin base: Polyurethane resin

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Pack sizes

12.5 kg pack

Pack consisting of:

- 4.69 kg component A
- 1.56 kg component B
- 6.25 kg component C

6.25 kg pack as a additional coating applied by roller (without comp. C filler)

Usage guide

at least 4.0 kg / m² KEMPERDUR TC coating with
 a) min. 4 kg/m² KEMPERDUR CQ 0408 Colorquarz **or**
 b) min. 5 kg/m² KEMCO NQ 0712 Natural Quartz **or**
 c) min. 4 kg/m² KEMCO NQ 0408 Natural Quartz.

Consumption when applied with a roller:

at least 0.4 kg/m²

Properties

Form	comp. A liquid Comp. C granular
Workability time *	approx. 15 min
Rainproof after*	approx. 4 h
Can be walked on after*	approx. 4 h
Ready for vehicular traffic *	approx. 8 h
Cured after*	approx. 8 h
Further coating after *	approx. 4 h
Next coat must be applied within*	max. 3 d

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

Concrete must be clean, dry (residual moisture in the upper 2 cm less than 5 %) and sound. Bituminous waterproofings or laitance should be completely removed before waterproofing or coating. The substrate should be prepared in such a way that an adhesive pull strength of > mid-1.0 N/mm² and the smallest individual value > 0.8 N/mm² is achieved. Observe the flatness tolerances defined in DIN 18202. Shrinkage cracks have to be closed. If the coating is applied on a waterproofing membrane, the membrane must adhere to the entire surface.

When applying the coating without waterproofing on concrete and screed surfaces indoors and outdoors, priming with KEMPERTEC EP/ EP5 Primer is necessary.

Can be applied on an existing waterproofing system according to the times given for further coating in the respective technical data sheet. The priming recommendations have to be observed.

Coating requirement

Only apply when the substrate and ambient temperatures exceed +5°C.

The maximum application temperature is 30°C.

In case of temperatures between +10 ° C and +30 ° C, acclimatize the material for 24h before use.

The viscosity increases as the temperature drops.

If the temperature falls below the dew point during application, moisture which can negatively affect adhesion may form on the surface (DIN 4108 - 5 Tab.1).

High air humidity (>80%) can affect the surface structure.

- Air humidity: <80%
- Substrate temperature >3K above dew point
- Air temperature >5°C
- Contraction joints and shrinkage cracks must be closed off.

Mixing

Add component B to component A and mix until you have a streak-free mixture.

Then add the entire package of KEMPERDUR TC surfacing component C (filler) gradually and stir in with a slow-running mixing device - mix until you achieve a homogeneous mixture. The ready-to-use mixture must be spread evenly over the surface to be coated using a scraper or a toothed trowel. In case of surfaces with a slope higher than 3%, in the components A 2 % KEMCO TX Thixotropic Additive should be stirred before mixing. KEMPERDUR TC coating should be provided with a mineral spreading or a coating, because KEMPERDUR® TC it is not color-stable.

To prevent mixing errors, the mixture should be placed in another container and re-mixed.

Mineral scattering on parking decks

The still wet KEMPERDUR TC coating is scattered liberally after approx. 30 min with

- KEMPERDUR CQ 0408 Colorquarz
- KEMCO Coloured quartz
- KEMCO NQ 0712 Natural Quartz
- or KEMCO NQ 0408 Natural Quartz

over the entire surface (leaving no gaps). After curing - depending on the weather conditions - brush off the excess material and seal with KEMPERDUR Finish glossy or KEMPERDUR Finish matt.

On balconies and patios

KEMPERDUR TC coating can be sealed with a coloured finish using KEMPERDUR Deko 2K and KEMPERDUR Deko. After application, a spiked roller is used to remove any air bubbles from the still wet KEMPERDUR TC coating or KEMPERDUR CQ Quartz is scattered as an alternative quartz layer (sealing with KEMPERDUR Deko transparent). For this type of application (e.g. fleece overlapping), KEMPERDUR TC coating can also be used as a levelling layer in combination with KEMPERTEC EP Primer, KEMPERTEC

EP5 primer or KEMPERTEC AC Primer as a protective layer against alkalinity beneath ceramic tiles (see also Technical Information TI 15 - Alkalinity).

As a coating applied by roller

The KEMPERDUR TC coating can also be used as brick-on-end course on a cured KEMPERDUR TC coating. For this purpose, KEMPERDUR® TC is used without the Component C (filler). Mix component B into component A until you achieve a streak-free mixture, transfer the mixture into a new container and apply with a roller with a consumption of approx. 0.4 kg/m² onto the surface. After a curing time of approx. 15-20 min the desired quartz sand can be scattered onto the whole surface (leaving no gaps) and then be sealed.

PPE

Personal protective equipment should be worn.

We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 15 - alkalinity
- TI 21 - substrate preparation
- TI 29 - slip resistance

Important notes

Always add the whole contents of the container of component C (filler material) to the mixture. Do not divide the contents of the container up. Fresh coatings have to be protected against contamination, humidity and moisture for a period of 4 hours.

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Do not allow to enter waters, drains or to penetrate the ground.

Depending on the nature and condition of the substrate, unevenness or overlaps may remain visible after application of the coating. This can be prevented by a higher level of consumption of the coating product, which has to be factored in.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained on a regular basis. Refinishing may be required depending on the level of wear.

Disposal

Comp. A+B	Liquid	EAK 08 04 09
Comp. A+B	cured	EAK 08 04 10

Issued: Vellmar, 2021-04-29

KEMPERDUR AC coating



Uses

- As a coating in combination with KEMPERDUR AC filler and KEMPERDUR AC (comp. A) on KEMPEROL AC Speed
- For new buildings and repair work

Features

- Rapid-curing
- UV-resistant
- Solvent-free
- 3-component
- Wear-resistant
- Resin base: PMMA
- Alkali resistant

Pack sizes

10 kg container (component A) in combination with KEMPEROL CP catalyst powder (component B; refer to the Curing Table for recommended quantities) and 23 kg bag KEMPERDUR AC filler.

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature of the substrate, in conjunction with KEMPERDUR AC filler: at least 4,0 kg/m².

Properties

Form	comp. A liquid (bluish)
	Comp. B powder
	comp. C granular (sandy)

Colour	Beige
Workability time *	approx. 20 min (2% KEMPEROL CP catalyst powder)
Rainproof after*	approx. 35 min
Can be walked on after*	approx. 35 min
Cured after*	approx. 35 min
Further coating after *	approx. 60 min

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Curing

Hardening takes place with KEMPEROL CP catalyst powder. The quantity added depends on the temperature.

Table for 10 kg KEMPERDUR AC Coating			
Temperature [°C]	KEMP. CP cat. powder - quantity [g]	Pot life in container [min]	Rainproof / surface cured [min]
+5°C	400	35 min	70 min
+10°C	400	30 min	60 min
+20°C	200	20 min	35 min
+30°C	100	20 min	30 min

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

Coating requirement

In case of temperatures between +10 ° C and +30 ° C, acclimatize the material for 24h before use.

During application, the surface temperature must be 3K above the dew point.

If the temperature falls below the dew point during application, moisture which can negatively affect adhesion may form on the surface (DIN 4108 - 5 Tab.1).

At temperatures above +25°C, protect the material against direct sunlight.

KEMPERDUR AC (comp. A) must only be used in combination with KEMPEROL CP catalyst powder. The quantity of catalytic powder depends on the respective material temperature (refer to the Curing table).

In case of surfaces with a slope higher than 3%, in the KEMPERDUR AC Coating KEMCO TX Thixotropic Additive are stirred in. The exact mixing ratio can be found in the technical data sheet for KEMCO TX Thixotropic Additive can be found.

To prevent mixing errors, the mixture should be placed in another container and re-mixed.

Application

The surfacing consists of KEMPERDUR AC Coating, the product KEMPEROL CP catalyst powder and the product KEMPERDUR AC filler. Please refer to the instructions for use for further information. Use a spiked roller to remove any air bubbles from the still wet KEMPERDUR AC coating directly after it has been applied. Once the surface of the coating is tack-free, after approx. 60 minutes KEMPERDUR AC-Finish is applied.

The mixture is applied with a notched trowel with a thickness of approx. 8 mm over the entire prepared substrate. Alternatively, use a screed rake (V notch, notch height 6.6 mm) to spread the mixture over the entire surface. After application, use a spiked roller to remove any air bubbles from the still wet coating.

Depending on the version, the still wet KEMPERDUR AC coating is scattered liberally with KEMCO NQ 0408 Natural Quartz or KEMPERDUR CQ 0408 Colorquarz (approx. 4 kg/m²). Sweep off any excess after curing and apply KEMPERDUR AC-Finish for a coloured or transparent seal coating.

PPE

For application in enclosed areas ensure there is sufficient ventilation. Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 22 - Application of KEMPEROL/KEMPERDUR AC products

Important notes

When applying KEMPERDUR AC Coating explosion protection for working equipment is necessary.

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained on a regular basis. Refinishing may be required depending on the level of wear.

Disposal

Liquid	EAK 08 04 09
cured	EAK 08 04 10

GISCODE

RMA10

Issued: Vellmar, 2021-04-29

KEMPERDUR AC filler



Uses

- Quartz sand mixture to produce a coating consisting of KEMPERDUR AC coating or KEMPERDUR AC Park

Features

- Graduated grain size
- System compatible and adapted to the specific purpose

Composition

Quartz sand mixture with consistent grain size.

Pack sizes

23 kg in paper bag

Usage guide

as KEMPERDUR AC coating:

min. 4.0 kg/m² (2.8 kg KEMPERDUR AC filler) KEMPERDUR AC coating at a layer thickness of 3 mm.

KEMPERDUR AC Coating System working packs consist of:

- 10.0 kg KEMPERDUR AC coating as component A
- KEMPEROL CP catalyst powder acc. to Table as a component B
- 23 kg KEMPERDUR AC filler as Component C.

as KEMPERDUR AC Park:

at least 4.0 kg/m² (2.8 kg KEMPERDUR AC filler)

Working packings of the coating consist of:

- 10.0 kg KEMPERDUR AC Park as component A
- KEMPEROL CP catalyst powder acc. to Table as a component B
- 23 kg KEMPERDUR AC filler as component C.

Shelf Life

Keep cool and dry. The bags must be kept air-tight.

Properties

Form	Granular /solid
------	-----------------

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Work steps after preparation of the substrate:

- Mixing in of KEMPEROL CP catalyst powder in KEMPERDUR AC coating
- Mixing in of KEMPERDUR AC filler

Mixing must be carried out with a slow-running mixing device (preferably a positive mixer) until you achieve a homogeneous mixture.

PPE

For application in enclosed areas ensure there is sufficient ventilation. Always wear personal protective equipment (breathing equipment with filter A/P2, protective gloves, safety goggles).

Important notes

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application.

Disposal

Quartz Sand Mixture	solid	EWC 19 12 09
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Issued: Vellmar, 2021-04-29

KEMPERDUR AC Park



Uses

- As trafficable covering for level surfaces (< 3%) in conjunction with the KEMPERDUR AC filler on KEMPEROL AC Speed
- As OS 10 proven system for parking decks and parking areas
- As OS 8 tested system for DIN 18531-5 and 18532-6
- For new buildings and repair work

Features

- Rapid-curing
- UV-resistant
- Solvent-free
- 3-component
- Wear-resistant
- Resin base: PMMA
- Alkali resistant
- Coloured finishes possible

Pack sizes

10 kg container (component A) in combination with KEMPEROL CP catalyst powder (component B; refer to the Curing Table for recommended quantities) and 23 kg bag KEMPERDUR AC filler.

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature of the substrate, in conjunction with KEMPERDUR AC filler: at least 4,0 kg/m².

Properties

Form	comp. A liquid (bluish) Comp. B powder comp. C granular (sandy)
Colour	Beige
Workability time * (2% KEMPEROL CP catalyst powder)	approx. 15 min
Rainproof after*	approx. 35 min
Can be walked on after*	approx. 35 min
Cured after*	approx. 35 min
Further coating after *	approx. 60 min

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Curing

Hardening takes place with KEMPEROL CP catalyst powder. The quantity added depends on the temperature.

Table for 10 kg KEMPERDUR AC Park			
Temperature [°C]	KEMP. CP cat. powder - quantity [g]	Pot life in container [min]	Rainproof / surface cured [min]
+5°C	400	35 min	70 min
+10°C	400	30 min	60 min
+20°C	200	20 min	35 min
+30°C	100	20 min	30 min

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

Coating requirement

In case of temperatures between +10 °C and +30 °C, acclimatize the material for 24h before use.

During application, the surface temperature must be 3K above the dew point.

If the temperature falls below the dew point during application, moisture which can negatively affect adhesion may form on the surface (DIN 4108 - 5 Tab.1).

At temperatures above +25°C, protect the material against direct sunlight.

KEMPERDUR AC Park may only with KEMPEROL CP catalyst powder may be used. The quantity of the catalyst powder must be adapted to the respective material temperature (see Table Hardening

To prevent mixing errors, the mixture should be placed in another container and re-mixed.

Application

The surfacing consists of KEMPERDUR AC Park, the product KEMPEROL CP catalyst powder and the product KEMPERDUR AC filler.

Issued: Vellmar, 2021-04-29

The mixture is applied with a notched trowel with a thickness of approx. 8 mm over the entire prepared substrate. Alternatively, use a screed rake (V notch, notch height 6.6 mm) to spread the mixture over the entire surface. After application, use a spiked roller to remove any air bubbles from the still wet coating.

The still wet KEMPERDUR AC Park coating is scattered liberally with KEMCO NQ 0408 Natural Quartz4 kg/m²). Sweep off any excess after curing and apply KEMPERDUR AC-Finish for a coloured or transparent seal coating.

PPE

For application in enclosed areas ensure there is sufficient ventilation. Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 22 - Application of KEMPEROL/KEMPERDUR AC products

Important notes

When applying KEMPERDUR AC Park explosion protection for working equipment is necessary.

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained on a regular basis. Refinishing may be required depending on the level of wear.

Disposal

Liquid	EAK 08 04 09
cured	EAK 08 04 10

GISCODE

RMA10

KEMPERDUR AC-Finish



Uses

- For sealing of KEMPERDUR AC, with KEMPERDUR CQ 0408 Colorquarz/ KEMCO NQ 0408 Natural Quartz spread TC surfaces KEMPEROL 2K-PUR, KEMPEROL V 210 M and KEMPEROL BR M waterproofing

Features

- Rapid-curing
- Decorative
- Matt
- Light-stable
- Solvent-free
- 2-component
- Resin base: PMMA

Pack sizes

5 kg container (component A) in conjunction with KEMPEROL CP catalyst powder (component B) Quantity added -see Table Hardening

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature and condition of the substrate : min. 0,6 kg/m²

Properties

Form	comp. A liquid
	Comp. B powder
Standard colour	Traffic grey

Light grey
Stone grey
Beige
Pebble grey
Pure white
Transparent
light ivory
orange brown
light blue
traffic red
traffic blue
traffic yellow **

Workability time * (2% KEMPEROL CP catalyst powder)	approx. 20 min
Rainproof after*	approx. 30 min
Can be walked on after*	approx. 60 min

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.
 ** only as a marking paint
 ** nur als Markierungsfarbe

Curing

Hardening takes place with KEMPEROL CP catalyst powder. The quantity added depends on the temperature.

Table for 5 kg KEMPERDUR AC Finish			
Temperature [°C]	KEMP. CP categ. powder - quantity [g]	Pot life in container [min]	Surface cured [min]
+5°C	200	35 min	60 min
+10°C	200	30 min	45 min
+20°C	100	20 min	30 min
+30°C	50	20 min	30 min

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

Coating requirement

Only apply at ambient and substrate temperatures of below 30°C to achieve a seamless and streak-free surface (store materials at room temperature).

In case of temperatures between +10 °C and +30 °C, acclimatize the material for 24h before use.

During application, the surface temperature must be 3K above the dew point.

If the temperature falls below the dew point during application, moisture which can negatively affect adhesion may form on the surface (DIN 4108 - 5 Tab.1).

KEMPERDUR AC Finish may only with KEMPEROL CP catalyst powder may be used. The quantity of the catalyst powder must be adapted to the respective material temperature (see Table Hardening

Mixing

KEMPERDUR AC Finish component A must be stirred thoroughly. Then add KEMPEROL CP catalyst powder and stir again thoroughly.

To prevent mixing errors, the mixture should be placed in another container and re-mixed.

Application

KEMPERDUR AC Finish must be spread evenly immediately after mixing with KEMPEROL CP catalyst powder.

Apply evenly in one operation using a nylon roller. To create a decorative surface, the KEMPERDUR CS Microchips can be blown evenly onto the surface thus applied using a chip gun or sprinkled onto the surface by hand.

When applying KEMPERDUR AC-Finish Transparent it must be made sure that the substrate is level, KEMPERDUR AC-Finish Transparent is applied with a uniform layer thickness and the applied quantity does not exceed 1 kg/m².

PPE

Sufficient ventilation is required. The corresponding instructions should be followed. Always wear personal protective equipment (breathing equipment with filter A/ P2, protective gloves, safety goggles). We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Please consider the following technical information:

- TI 22 - Application of KEMPEROL/KEMPERDUR AC products
- TI 24 - cleaning and maintenance

Important notes

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Do not allow to enter waters, drains or to penetrate the ground.

Please note that certain media (e. g. rust, copper, petals, red wine, etc.) can, due to contained pigments or antioxidant agents (e.g. in rubber tyres), cause permanent discolouration of the coating which, however, does not impair the protection provided by it.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained on a regular basis. Refinishing may be required depending on the level of wear.

Disposal

Liquid	EAK 08 04 09
cured	EAK 08 04 10

GISCODE

RMA10

Issued: Vellmar, 2021-04-29

KEMPERDUR AC Park+



Uses

- As trafficable covering in conjunction with the KEMPERDUR AC Park+ special filler to KEMPEROL AC Speed
- Also possible without waterproofing depending on the respective requirement
- As an OS 10 tested system for parking decks, parking spaces and ramps
- For new buildings and repair work

Features

- Rapid-curing
- UV-resistant
- Solvent-free
- 3-component
- Wear-resistant
- Resin base: PMMA
- Alkali resistant

Pack sizes

15 kg container (component A) in conjunction with KEMPEROL CP catalyst powder (component B). Quantity added - see Table Hardening 25 kg bag KEMPERDUR AC Park+ special filler (component C).

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature of the substrate, in conjunction with KEMPERDUR AC Park+ special filler: at least 4,0 kg/m².

Properties

Form	comp. A liquid
	Comp. B powder
	Comp. C granular
Colour	Stone grey
Workability time * (2% KEMPEROL CP catalyst powder)	approx. 15 min
Rainproof after*	approx. 35 min
Can be walked on after*	approx. 60 min
Cured after*	approx. 60 min
Further coating after *	approx. 60 min

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Curing

Hardening takes place with KEMPEROL CP catalyst powder. The quantity added depends on the temperature.

Table for 15 kg KEMPERDUR AC Park+			
Temperature [°C]	KEMPEROL CP cat. powder - quantity [g]	Pot life in container [min]	Rainproof / surface cured [min]
+5°C	600	35 min	70 min
+10°C	600	30 min	60 min
+20°C	300	20 min	35 min
+30°C	150	20 min	30 min

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

Coating requirement

In case of temperatures between +10 °C and +30 °C, acclimatize the material for 24h before use.

During application, the surface temperature must be 3K above the dew point.

If the temperature falls below the dew point during application, moisture which can negatively affect adhesion may form on the surface (DIN 4108 - 5 Tab.1).

At temperatures above +25°C, protect the material against direct sunlight.

KEMPERDUR AC Park+ may only with KEMPEROL CP catalyst powder may be used. The quantity of the catalyst powder must be adapted to the respective material temperature (see Table Hardening

To prevent mixing errors, the mixture should be placed in another container and re-mixed.

Application

The surfacing consists of KEMPERDUR AC Park+, the product KEMPEROL CP catalyst powder and the product KEMPERDUR AC Park+ special filler.

Spread the mixture with a smoothing trowel across the entire surface of the prepared substrate over the grain and then work your way over the entire surface once more with the nylon roller (18 cm wide).

PPE

For application in enclosed areas ensure there is sufficient ventilation. Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 22 - Application of KEMPEROL/KEMPERDUR AC products

Important notes

When applying KEMPERDUR AC Park+ explosion protection for working equipment is necessary.

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained on a regular basis. Refinishing may be required depending on the level of wear.

Disposal

Liquid	EAK 08 04 09
cured	EAK 08 04 10

GISCODE

RMA10

Issued: Vellmar, 2021-04-29

KEMPERDUR AC Park+ special filler

Uses

- Quartz sand mixture for creating a coating from KEMPERDUR AC Park+

Features

- Graduated grain size
- System compatible and adapted to the specific purpose

Pack size

25 kg paper bag

consumption

At least 4.0 kg/m² (2.5 kg KEMPERDUR AC Park+ special filler) KEMPERDUR AC Park+ for a layer thickness of 3mm.

Waterproofing packages consist of:

- 15 kg KEMPERDUR AC Park+ as Component A
- KEMPEROL CP catalyst powder acc. to Table as a component B
- 25 kg KEMPERDUR AC Park+ special filler as Component C.

Shelf Life

Keep cool and dry. The bags must be kept air-tight.

Properties

Form	Granular /solid
------	-----------------

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Work steps after preparation of the substrate:

- Mixing in of KEMPEROL CP catalyst powder in KEMPERDUR AC Park+
- Mixing in of KEMPERDUR AC Park+ special filler

Mixing must be carried out with a slow-running mixing device (preferably a positive mixer) until you achieve a homogeneous mixture.

PPE

For application in enclosed areas ensure there is sufficient ventilation. Always wear personal protective equipment (breathing equipment with filter A/P2, protective gloves, safety goggles).

Important notes

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained on a regular basis. Refinishing may be required depending on the level of wear.

Disposal

Quartz Sand Mixture	solid	EWC 19 12 09
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Issued: Vellmar, 2021-04-29

KEMPERTEC AC Jointing compound



Uses

- Joint filling compound in conjunction with PMMA products from KEMPER SYSTEM

Features

- Rapid-curing
- Excellent adhesion on PMMA surfaces
- User-friendly
- Elongation up to 300%
- High chemical resistance
- Can also be applied at low temperatures
- Excellent waterproof properties
- High resistance
- Workable at ambient temperatures of up to -5 °C
- Wear-resistant
- Resin base: PMMA

Consumption

at least mind. 40G/ linear m at 0.25cm² joint cross-section

Delivery size

5 kg container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Properties

Form	Liquid
Colour	Pebble grey
Workability time *	approx. 20 min

(2% KEMPEROL CP catalyst powder)

Cured after* approx. 2 h
depending on the width and depth of the joint

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Curing

Hardening takes place with KEMPEROL CP catalyst powder. The quantity added depends on the temperature.

Table for 5 kg KEMPERTEC AC Jointing Compound	
Temperature [°C]	KEMPEROL CP Cat.powder quantity [g]
+5 °C to +10 °C	200
+11 °C to +14 °C	150
+15 °C to +25 °C	100

Application

Preparing the substrate

PMMA surfaces must be cured, dry, stable, free from substances impairing adhesion and shall be prepared appropriately. The joints in PMMA surfaces to be back-filled must be cleaned with KEMCO MEK Cleaning Agent and slightly roughened with abrasive paper (P>180), if they are exposed for more than 3 days.

KEMPERTEC AC Jointing Compound may only with KEMPEROL CP catalyst powder may be used. The quantity of the catalyst powder must be adapted to the respective material temperature (see Table Hardening

In order to avoid a 3 flank adhesion, the horizontal area of a joint shall be separated, e.g. by means of a PE fabric tape.

Application

Mix the KEMPEROL CP catalyst powder component B intensively and without streaks in KEMPERTEC AC Jointing Compound component A. The streak-free mixture can be poured directly from the container. Depending on the size of the joint, a suitable pouring cup should be used.

Note

Please consider the following technical information:

- TI 22 - Application of KEMPEROL/KEMPERDUR AC products
- TI 33 - processing of KEMPEROL AC Speed / AC Speed+ sealings at temperatures below +5°C

Important information

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Disposal

Comp. A+B	Liquid	EAK 08 04 09
Comp. A+B	cured	EAK 08 04 10

Issued: Vellmar, 2021-04-29

KEMPERTEC AC GF Gradient filler



Uses

- As a leveling compound for leveling of unevenness
- For creating slopes up to 4%
- For new buildings and repair work

Features

- Good resistance to weathering
- Can be used at temperatures between +5°C and +30°C
- Rapid-curing
- Compatible with the KEMPEROL AC system
- High chemical resistance
- Resin base: PMMA
- easy to process

Consumption

Per mm of layer thickness: at least 2.1 kg/m².

Pack size

25 kg container (component A) in conjunction with KEMPEROL CP catalyst powder (component B), quantity added - see Table

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Properties

Colour	Beige
Workability time*	approx. 15 min
Rainproof after *	approx. 40 min
Can be walked on after *	approx. 2 h
Cured after*	approx. 72 h

Further coating after * approx. 2 h

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Curing

Hardening takes place with KEMPEROL CP catalyst powder. The quantity added depends on the temperature.

Table for 25 kg KEMPERTEC AC GF Gradient Filler	
Temperature [°C]	KEMPEROL CP categ. powder - quantity [g]
+5 °C to +10 °C	160
+11 °C to +15 °C	120
+16 °C to +25 °C	80
+26 °C to +30 °C	40

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

Before applying KEMPERTEC AC GF Gradient filler the substrate must first be primed with KEMPERTEC AC Primer (consumption min. 0.5 kg/m²).

(refer to Technical Information TI 21 - Substrate Assessment)

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

KEMPERTEC AC GF Gradient Filler may only with KEMPEROL CP catalyst powder may be used. The quantity of the catalyst powder must be adapted to the respective material temperature (see Table Hardening

Partial quantities can be taken. Table Hardening must be observed accordingly.

Mixing

KEMPERTEC AC GF Gradient Filler component A must be stirred thoroughly.

KEMPEROL CP catalyst powder Mix in the component B intensively in KEMPERTEC AC GF Gradient Filler component A. KEMPERTEC AC GF Gradient Filler immediately apply on the primed substrate.

Please note that the maximum layer thickness of 30 mm per layer must not be exceeded!

Job interruptions and further coating:

Interruptions of more than 24 hours up to 14 days:
Clean the working area with KEMCO MEK Cleaning Agent.

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Important information

Flammable vapour/air mixtures may form in areas with inadequate ventilation.

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application.

When applying KEMPERTEC AC GF Gradient Filler explosion protection for working equipment is necessary.

Do not allow to enter waters, drains or to penetrate the ground.

Not suitable for use in swimming pools!

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Disposal

Liquid	EAK 08 04 09
cured	EAK 08 04 10

GISCODE

RMA10

Issued: Vellmar, 2021-04-29

KEMPERTEC AC RM Repair Mortar



Uses

- For re-profiling
- As a filler compound for leveling of unevenness
- For repairing breakouts and holes up to 20 mm depth

Features

- Rapid-curing
- Compatible with the KEMPEROL AC system
- High elasticity
- Resin base: PMMA

Consumption

Per mm of layer thickness: at least 1.4 kg/m².

Pack size

10 kg container (component A) in conjunction with KEMPEROL CP catalyst powder (component B), quantity added - see Table

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Properties

Form	thixotropic
Colour	Grey
Workability time*	approx. 10 min
Rainproof after *	approx. 35 min
Can be walked on after *	approx. 60 min
Further coating after *	approx. 60 min

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Curing

Hardening takes place with KEMPEROL CP catalyst powder. The quantity added depends on the temperature.

Table for 10 kg KEMPERTEC AC RM Repair Mortar			
Temperature [°C]	KEMPEROL CP categ. powder - quantity [g]	Pot life in the container [min]	Surface hard- ened [min]
+5°C	400	30 min	60 min
+10°C	400	25 min	50 min
+20°C	200	10 min	30 min
+25°C	200	10 min	30 min
+30°C	100	10 min	25 min

Application

The substrate must be dry, sound and free from any material that would hinder adhesion.

KEMPERTEC AC RM Repair Mortar It must be processed only for substrate temperatures and ambient temperatures between 5 °C bis max. 30 °C

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

KEMPERTEC AC RM Repair Mortar may only with KEMPEROL CP catalyst powder may be used. The quantity of the catalyst powder must be adapted to the respective material temperature (see Table Hardening

In case of temperatures between +10 °C and +30 °C, acclimatize the material for 24h before use.

KEMPEROL CP catalyst powder Mix in the component B intensively in KEMPERTEC AC RM Repair Mortar component A. KEMPERTEC AC RM Repair Mortar immediately apply on the primed substrate.

Once the mixture is ready to use, use a suitable tool, e.g. a smoothing trowel or a spatula, to spread it over the substrate.

PPE

Sufficient ventilation is required. The corresponding instructions should be followed. Always wear personal protective equipment (breathing equipment with filter A/ P2, protective gloves, safety goggles). We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 21 - substrate preparation
- TI 22 - Application of KEMPEROL/KEMPERDUR AC products
- TI 23 - solvent-based products

Important information

Flammable vapour/air mixtures may form in areas with inadequate ventilation.

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application.

When applying KEMPERTEC AC RM Repair Mortar explosion protection for working equipment is necessary.

Do not allow to enter waters, drains or to penetrate the ground.

Not suitable for use in swimming pools!

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Disposal

Liquid	EAK 08 04 09
cured	EAK 08 04 10

GISCODE

RMA10

Issued: Vellmar, 2021-04-29

KEMPERDUR CS Microchips



Application

The KEMPERDUR CS Microchips are blown onto the KEMPERDUR® products while they are still wet using a chip gun or sprinkled onto the surface by hand.

Personal protective equipment should be worn.

Note

Please consider Technical Information TI 27 - Chips.

Issued: Vellmar, 2021-04-29

Uses

- For the decorative surface treatment of
 - KEMPERDUR Deko
 - KEMPERDUR Deko 2K
 - KEMPERDUR HB thick coating
 - KEMPERDUR AC-Finish

Features

- Decorative
- Based on: PVC and PVA

Pack sizes

1 kg bag

Size of chips: 0,25 -1,4 mm

Shelf Life

Store in a dry environment.

Usage guide

Depending on the chip density, at least 100 g/m²

Properties

Form	solid
Colour	Ready-to-use mix white/ grey/black (1:1:1)

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

KEMPERDUR CL Chips



Uses

- For the decorative surface treatment of
 - KEMPERDUR Deko
 - KEMPERDUR Deko 2K
 - KEMPERDUR HB thick coating

Features

- Decorative
- Slip-resistant
- Based on: PVC and PVA

Pack sizes

1 kg

Size of Chips 2 - 5 mm

Shelf Life

Store in a dry environment.

Properties

Form	solid
Colour	White black light grey

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Usage guide

Depending on the chip density, at least 30 g/m²

CE marking

Component to 4	ETA 03/0043
	ETA 03/0044

Application

Apply and spread KEMPERDUR surfacings. Use a chip blast gun to blow chips into the fresh coat or scatter them by hand. KEMPERDUR Deko 2K or KEMPERDUR HB thick coating can be sealed after 12 hours and KEMPERDUR Deko after 72 hours with KEMPERDUR Finish. Only apply when the substrate and ambient temperatures are at least +5 °C.

Personal protective equipment should be worn.

Disposal

solid	EWC16 01 19
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Issued: Vellmar, 2021-04-29

KEMPERDUR CQ 0408 Colorquarz



Application

See Technical information sheet KEMPERDUR Deko transparent and KEMPERDUR® TC.

To avoid colour variations or shading over the surface, material from different bags must be mixed in advance.

Disposal

solid	EWC 19 12 09
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Issued: Vellmar, 2021-04-29

Uses

- For new buildings and repair work
- For decorative design of wear layers
 - KEMPERDUR TC coating
 - KEMPERDUR AC coating
 - KEMPERDUR quartz covering made of KEMPERDUR Deko transparent and KEMPERDUR CQ 0408 Colorquarz
- As scatterings
- As a coating for concrete, screed, KEMPEROL waterproofing membranes or existing ceramic coatings

Features

- Light-stable - colour-intensive
- Temperature and weather resistant
- Withstands foot traffic

Pack sizes

25 kg bag

CE marking

Component to 4	ETA 03/0025
	ETA 03/0026
	ETA 03/0043
	ETA 03/0044

Shelf Life

Cool and dry.

KEMPERDUR Deko transparent



Uses

- For new buildings and repair work
- In combination with the KEMPERDUR CQ 0408 Colorquarz as KEMPERDUR Quartz covering
- In form of KEMPERDUR quartz covering as non-slip floor covering for:
 - Balconies, terraces and roofs
 - public ways
 - pergolas
 - Paths in nursing homes and schools
 - Roof terraces
 - Footbridges
 - Stairs

Features

- UV-resistant
- Light-stable
- 1-component
- Low in solvents
- Dirt-repellent
- Resin base: Polyurethane resin

Pack size

5 kg in a container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

KEMPERDUR Deko transparent as

1. Template for the color quartz spreading of at least 300 g/m²

2nd head sealing after sweeping off the surplus quartz at least 400 g/m².

Properties

Form	Liquid
Colour	Transparent
Rainproof after*	approx. 3 h
Can be walked on after*	approx. 24 h
Cured after*	approx. 7 d

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

CE marking

Component to 4	ETA 03/0043
	ETA 03/0044

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

Coating requirement

Only apply when the substrate and ambient temperatures exceed +5°C.

The maximum application temperature is 30°C.

In case of temperatures between +10 °C and +30 °C, acclimatize the material for 24h before use.

During application, the surface temperature must be 3K above the dew point.

If the temperature falls below the dew point during application, moisture which can negatively affect adhesion may form on the surface (DIN 4108 - 5 Tab.1).

Up to 250 ml of KEMPERTEC 1K thinner can be added to the 5 kg container at temperatures below 10 °C.

For a level surface, we recommend to lay the KEMPEROL waterproofing butt-joined in combination with the KEMCO RS Reinforcement Strip .

Use as KEMPERDUR Quartz Surfacing

Cover the whole area of the substrate to be coated with at least 300 g/m² KEMPERDUR Deko transparent and scatter a generous amount of KEMPERDUR CQ 0408 Colorquarz or KEMCO Coloured quartz (min.4 kg/m²) over the layer while still wet. After curing – after 16 hours at the earliest, depending on weather conditions – brush off the excess and seal with KEMPER-

DUR Deko transparent over the entire surface with a consumption of at least 400 g/m². The material can either be applied with a nylon roller or sponge board.

PPE

For application in enclosed areas ensure there is sufficient ventilation. Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 23 - solvent-based products
- TI 24 - cleaning and maintenance
- TI 29 - slip resistance

Important notes

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Do not allow to enter waters, drains or to penetrate the ground.

Please note that certain media (e. g. rust, copper, petals, red wine, etc.) can, due to contained pigments or antioxidant agents (e.g. in rubber tyres), cause permanent discolouration of the coating which, however, does not impair the protection provided by it.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained on a regular basis. Refinishing may be required depending on the level of wear.

Disposal

Liquid	EAK 08 04 09
cured	EAK 08 04 10

GISCODE

PU50

Issued: Vellmar, 2021-04-29

KEMPERDUR MT mineral tile adhesive



Uses

- Adhesive for increased requirements with high-level stability for laying tiles on surfaces with high loads
- Indoor and outdoor
- For walls and floors
- For stoneware tiles
- For the installation of ceramic tiles and slabs, artificial and natural stone by the thin and medium-bed method
- Suitable for all types of ceramic tiles
- For KEMPEROL sealings with appropriate preparation

Features

- Waterproof
- Frost resistant
- Hydraulically bonding
- Highly flexible
- Suitable for floor heating
- Cement-containing mortar
- Based on: Portland cement

Pack sizes

25 kg dry mortar in paper bag

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature and condition of the substrate, on the type of tiles to be installed, on the tool handling and application method (combined method) - Depending on the notch spacing 1.9 - 3,4 kg/m².

The quantities given refer to the dry mortar.

Properties

Form	solid
Colour	Grey
Workability time*	approx. 2 h
Maturing time	approx. 5 min.
Open time	approx. 30 min
Can be walked on after *	approx. 8 h
Available after *	approx. 24 h
Cured after*	approx. 7 d

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

Substrates must be dry, firm and free from contaminants which may affect adhesion and must be prepared accordingly (e. g. bonding coat).

At the time of processing, all temperatures (air, surface, material and material to be laid) must lie between 5 and 25 °C.

In case of temperatures between +10 ° C and +30 ° C, acclimatize the material for 24h before use.

Mixing

KEMPERDUR MT mineral tile adhesive shall be mixed homogenously in a clean container with cold tap water (approx. 6.25 l) without lumps. We recommend a stirring device with 600 revolutions/minute with spiral or double disc stirrer. Briefly stir and apply the fresh mortar after a maturing time of approx. 5 minutes. Observe the adhesion time of the fresh mortar; after skin formation, the mortar shall be removed from the laying surface and fresh mortar shall be combed on again. Expansion joints must not be bridged with mortar.

PPE

Personal protective equipment should be worn.

We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools with water immediately after use.

Note

Please observe Technical Information TI 21.

Important notes

The applicable ETAG 022 in its current version as well as the "standard rules of technology" and the state of the art for the respective task apply during waterproofing production. For chemical resistance, see the Chemical Resistance List A-Z.

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application.

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KEMCO Decor Stone / Natural Stones



Important note

Please refer to the respective safety data sheet for hazard warnings, protective measures, hazardous substance classes and correct disposal!

Issued: Vellmar, 2021-04-29

Application area

- For the decorative design/finish of the different surfacing systems for balconies, terraces, walls and floors
- For new buildings and repair work

Features

- Mechanically rounded, natural appearance
- Washed and dried
- Grading curve 2 - 4 mm

Pack sizes

25 kg bag

Storage

Store in closed original containers in dry rooms at temperatures between +5°C and +25°C.

Allow the material to stabilize to between +18°C and +20°C for at least 24 hours prior to use.

Properties

Weight	approx. 2.50 g/cm ³ , bulk weight 1.7 t/m ³
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* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

To avoid colour variations or shading over the surface, material from different bags must be mixed in advance.

KEMCO QB1 Binder



Application area

- Covering for interior areas, covered walkways, balconies and terraces
- For new buildings and repair work
- To produce decorative finishes made of KEMCO Decor Stone / Natural Stones and KEMPERDUR CQ 0408 Colorquarz
- Indoor and outdoor use
- On KEMPEROL waterproofing products

Features

- Solvent-free
- Odourless
- Lightfast
- AgBB-compliant
- Air-humidity cured
- 1 part (single component)
- Weatherproof
- Resin base: Polyurethane resin

Pack size

1.75 kg package
5.25 kg package

Storage

Store unopened in a cool, frost-free and dry place, see label for use before date.

Consumption

7 mass% = 1.75 kg package for 25 kg KEMCO Decor Stone / Natural Stones

Ready-to-use mixture: 18 kg/m² KEMCO Decor Stone / Natural Stones for a layer thickness of 8 mm

10 mass% = 2.50 kg for 25 kg KEMPERDUR CQ 0408 Colorquarz

Ready-to-use mixture: 7 kg/m² KEMPERDUR CQ 0408 Colorquarz for a layer thickness of 3 mm

Properties

Form	Liquid
Colour	transparent yellowish
Workability time*	approx. 45 min
Rainproof after*	approx. 2 h
Can be walked on after*	approx. 72 h
Cured after *	approx. 3 d
Layer thickness of the finished covering (fleece laid with overlaps)	approx. 8 mm
Layer thickness of the finished covering with Colour Quartz	approx. 3mm
Fire exposure from outside	B _{fl} **, ***
Non-slip class	R9 ***

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

** Classification according to DIN EN 13501-1
2006: DIN 4102-14 - Resistance to flying sparks and radiant heat.

*** Checked with KEMCO Decor Stone / Natural Stones

Application

Preparing the substrate

Substrates like concrete, screed or KEMPEROL waterproofing products must be level, dry, firm and free of from any substances which may hinder adhesion. Surfaces must be prepared and primed in line with the manufacturer's guidelines.

The still wet KEMCO POX 2K Primer or KEMPERTEC EP-/EP5 Primer is scattered with approx. 300 g/m² KEMCO NQ 0408 Natural Quartz as a bonding coat.

In die noch frische KEMPERTEC AC Primer werden mind. 2 kg/m² KEMCO NQ 0408 Natural Quartz deckend Korn an Korn als Haftbrücke eingestreut.

Coating requirement

In case of temperatures between +10 ° C and +30 ° C, acclimatize the material for 24h before use. When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

Optimal processing temperature at > + 10 ° C (air temperature).

Hohe Luftfeuchtigkeit (>80%) kann einen Einfluss auf die Oberflächenstruktur haben.

Mixing

Application with KEMCO Decor Stone / Natural Stones and KEMPERDUR CQ 0408 Colorquarz: After opening the container, stir the binder thoroughly with a wooden stick.

Stir the product KEMCO QB1 Binder with a slow-running positive mixer thoroughly into the KEMCO Decor Stone / Natural Stones until you achieve a homogeneous mixture with the binder and the stones. Mixing time: 5 min; use within 40 min.

To avoid foaming, empty the mixing bucket immediately after the mixing process without leaving any residues. Avoid material accumulation.

Application

Divide larger areas into bays according to the German "Tile-Laying Guidelines". Expansion joint profile rails are used for this subdivision. Complete each bay in one operation. Spread the prepared mixture evenly over the substrate with a straight-edge, smooth the surface and compact it lightly with a smoothing trowel. Afterwards, smooth the surface evenly again with the smoothing trowel.

PPE

Personal protective equipment must be worn.

We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please note the following technical information:

- TI 21 – Substrate Assessment
- TI 24 - Cleaning and maintenance
- TI 29 - Non-slip classes

Important note

The safety data sheets, the container labelling and the danger and the safety recommendations on the containers must be complied with during transport, storage and processing; as are the chemical trade association information sheets.

On surfaces in an exposed position, e. g. in a forest location, or when ponding occurs, with KEMCO Decor Stone / Natural Stones algae growth, soiling or the like are possible.

Wear surfaces are subjected to mechanical stress and therefore require periodic inspection/maintenance. Depending on the degree of wear, a rework may be required.

Surface stickiness may persist for up to three days depending on outside temperature and air humidity.

Disposal

Liquid

EAK 08 04 09

cured

EAK 08 04 10

GISCODE

PU40

Issued: Vellmar, 2021-04-29

KEMPERDUR EP-Finish



Uses

- For new buildings and repair work
- As sealing on with KEMCO natural quartz spread KEMPEROL 2K-PUR waterproofing and on spreaded KEMPERDUR TC coating
- Especially for parking decks

Features

- Decorative
- Solvent-free
- 2-component
- Minor yellowing might occur in the presence of UV
- Glossy
- Resin base: Epoxy resin

Composition

2-component coating based on Epoxy resin.

Pack sizes

6 kg in a container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Can be stored unopened in a cool, dry, frost-free place. Use by: see label on pack. At temperatures below 5 °C, crystallisation may occur. This can be reversed by careful heating (40 °C).

Usage guide

Depending on the nature and condition of the substrate : min. 0,7 kg/m²

Properties

Form	Liquid
	Comp. B liquid
Standard colour	Stone grey
Special colours	On request
Workability time *	approx. 25 min
Rainproof after*	approx. 24 h
Can be walked on after*	approx. 24 h
Cured after*	approx. 48 h

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

The substrate of the surface to be coated must be dry, firm and free from materials that could reduce the bond.

Coating requirement

Only apply when substrate and ambient temperatures are ≥10°C and at a max. relative air humidity of 75%.

In case of temperatures between +10 °C and +30 °C, acclimatize the material for 24h before use.

During application, the surface temperature must be 3K above the dew point.

If the temperature falls below the dew point during application, moisture which can negatively affect adhesion may form on the surface (DIN 4108 - 5 Tab.1).

Mixing

Add component B to component A and mix until you have a streak-free mixture.

To prevent mixing errors, the mixture should be placed in another container and re-mixed.

Application

For a full-surface sealing, the specified KEMPERDUR EP-Finish have to be distributed evenly across the surface using a rubber squeegee before using a nylon roller for smoothing out in a criss-cross fashion. Avoid material accumulation.

Only use containers with the same batch number in order to avoid differences in colour over one surface.

Weather conditions:

- The product KEMPERDUR EP-Finish must be protected against moisture until it has fully cured (approx. 24 h at 23°C) - otherwise a white and/or sticky film may form on the surface.
- Despite high resistance to yellowing, discolouration or yellowing cannot be fully excluded.

PPE

Personal protective equipment should be worn.

We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 24 - cleaning and maintenance
- TI 29 - slip resistance

Important notes

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Do not allow to enter waters, drains or to penetrate the ground.

Not suitable for use in swimming pools!

Please note that certain media (e. g. rust, copper, petals, red wine, etc.) can, due to contained pigments or antioxidant agents (e.g. in rubber tyres), cause permanent discolouration of the coating which, however, does not impair the protection provided by it.

Multi-component polyurethane, polyester, epoxy and methyl methacrylate resins react under heat development. After mixing the components, the product must not remain in the mixing container for longer than the workability time. Non observance may cause heat and smoke development and may, in extreme cases, even result in a fire.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained on a regular basis. Refinishing may be required depending on the level of wear.

Disposal

Comp. A+B	Liquid	EAK 08 04 09
Comp. A+B	cured	EAK 08 04 10

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KEMPERDUR Finish glossy



Uses

- For new buildings and repair work
- For sealing of chip spread in the case of KEMPERDUR Deko, KEMPERDUR Deko 2K and KEMPERDUR HB thick coating
- For sealing of KEMPERDUR color quartz spreadings
- For sealing of KEMPEROL waterproofings at special constructions

Features

- Light-stable
- 1-component
- Dirt-repellent
- Easy to clean
- Solvent-containing
- Resin base: Polyurethane resin

Pack sizes

10 kg in a container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature and condition of the substrate
: min. 0,2 kg/m²

Properties

Form	Liquid
Standard colour	Clear

Rainproof after*	approx. 3 h
Can be walked on after*	approx. 12 h
Cured after*	approx. 3 d

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

Filth or contamination of the substrate must be eliminated.

Coating requirement

Only apply when the substrate and ambient temperatures exceed +5°C.

The maximum application temperature is 30°C.

In case of temperatures between +10 ° C and +30 ° C, acclimatize the material for 24h before use.

During application, the surface temperature must be 3K above the dew point.

If the temperature falls below the dew point during application, moisture which can negatively affect adhesion may form on the surface (DIN 4108 - 5 Tab.1).

Application

KEMPERDUR Finish glossy is applied in one operation and spread with a nylon roller to achieve a full covering.

PPE

For application in enclosed areas ensure there is sufficient ventilation. Avoid direct contact with skin.

Personal protective equipment should be worn.

We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Note

Please consider the following technical information:

- TI 23 - solvent-based products
- TI 24 - cleaning and maintenance
- TI 29 - slip resistance

Important notes

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Do not allow to enter waters, drains or to penetrate the ground.

Please note that certain media (e. g. rust, copper, petals, red wine, etc.) can, due to contained pigments or antioxidant agents (e.g. in rubber tyres), cause permanent discolouration of the coating which, however, does not impair the protection provided by it.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained on a regular basis. Refinishing may be required depending on the level of wear.

Disposal

Liquid	EAK 08 04 09
cured	EAK 08 04 10

GISCODE

PU50

Issued: Vellmar, 2021-04-29

KEMPERDUR Finish matt



Uses

- For sealing of chip spread in the case of KEMPERDUR Deko, KEMPERDUR Deko 2K and KEMPERDUR HB thick coating
- For sealing of KEMPERDUR color quartz spreadings

Features

- Silk finish
- Light-stable
- 1-component
- Solvent-containing
- Based on: polyurethane resin

Pack sizes

4 kg in a container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Usage guide

Depending on the nature and condition of the substrate
: min. 0,2 kg/m²

CE marking

Component to 4	ETA 03/0025
	ETA 03/0026
	ETA 03/0043
	ETA 03/0044

Properties

Form	Liquid
Standard colour	Transparent
Rainproof after*	approx. 3 h
Can be walked on after*	approx. 24 h
Cured after*	approx. 3 d

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

The substrate must be dry, sound and free from any material that would hinder adhesion.

Filth or contamination of the substrate must be eliminated.

Coating requirement

KEMPERDUR Finish matt may only be applied when substrate and ambient temperatures exceed 5°C.

In case of temperatures between +10 ° C and +30 ° C, acclimatize the material for 24h before use.

Application of KEMPERDUR Finish matt to KEMPERDUR Deko after approx. 3 days on KEMPERDUR Deko 2K and KEMPERDUR HB thick coating after approx. 12 hours

During application, the surface temperature must be 3K above the dew point.

If the temperature falls below the dew point during application, moisture which can negatively affect adhesion may form on the surface (DIN 4108 - 5 Tab.1).

Mixing

Application

To improve the anti-slip classification, KEMPERDUR ASG granulate rh is stirred into KEMPERDUR Finish matt . Apply in one operation with a nylon roller to achieve to cover the entire surface. While the work is in progress regularly stir the mixture in order to prevent the granules from settling.

PPE

For application in enclosed areas ensure there is sufficient ventilation.

Personal protective equipment should be worn.

We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools with water immediately after use.

Note

Please consider the following technical information:

- TI 23 - solvent-based products
- TI 24 - cleaning and maintenance
- TI 29 - slip resistance

Important notes

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Do not allow to enter waters, drains or to penetrate the ground.

Avoid skin contact.

Please note that certain media (e. g. rust, copper, petals, red wine, etc.) can, due to contained pigments or antioxidant agents (e.g. in rubber tyres), cause permanent discolouration of the coating which, however, does not impair the protection provided by it.

Floor finishes are subjected to mechanical stress and should therefore be inspected / maintained on a regular basis. Refinishing may be required depending on the level of wear.

Disposal

Liquid	EAK 08 04 09
cured	EAK 08 04 10

GISCODE

PU50

Issued: Vellmar, 2021-04-29

KEMPERDUR ASG granulate rh



PERDUR Finish (corresponds to 1% by weight) and stir thoroughly. Afterwards, spread the mixture evenly with a nylon roller.

Disposal

solid	EWC16 01 19
-------	-------------

Issued: Vellmar, 2021-04-29

Uses

- To increase the skid resistance of KEMPERDUR coating systems

Features

- Slip-resistant
- Resin base: Polyolefins

Pack sizes

2,5 kg in a bucket

Shelf Life

Store in a dry environment.

Usage guide

From at least 5 g/m² depending on the desired degree of slipping reduction and type of processing.

CE marking

Component to 4	ETA 03/0043
	ETA 03/0044

Properties

Form	solid
------	-------

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

The product KEMPERDUR ASG granulate rh must be applied in direct combination with KEMPERDUR Finish matt. To do that, add 40 g of granulate to 4 kg of KEM-

KEMPERTEC KR Quartz Sand Mixture



Uses

- As repair mortar or filling compound in combination with KEMPERTEC EP Primer, KEMPERTEC EP5 primer or KEMPERTEC AC Primer
- For re-profiling
- As a coating for concrete, screed or existing ceramic coatings
- For new buildings and repair work

Features

- System compatible and adapted to the specific purpose
- low-dust

Composition

Quartz sand and fillers with consistent particle size.

Pack sizes

25 kg bag

Shelf Life

Cool and dry.

Usage guide

Per mm of layer thickness: at least 1,5 kg/m².

Properties

Form	Granular /solid
------	-----------------

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

CE marking

Component to 1	ETA 03/0025
	ETA 03/0026
	ETA 03/0043
	ETA 03/0044

Application

Preparing the substrate

The substrate must be dry (in concrete, the residual moisture in the upper 2 cm must be < 5 %), sound and free from any material that would hinder adhesion.

(refer to Technical Information TI 21 - Substrate Assessment)

The priming recommendations should be followed.

When executed, the surface temperature must be 3 K above the dew point. If the dew point is undershot, a moisture film, which has a separating effect, can form on the surface to be processed (see Technical Information TI 16).

Use as a filling compound

For use as a filling compound, KEMPERTEC KR Quartz Sand Mixture can be mixed in a ratio of approx. 1 : 4 with KEMPERTEC EP Primer, in a ratio of approx. 1 : 2 with KEMPERTEC EP5 primer or in a ratio of approx. 1 : 3 with KEMPERTEC AC Primer. This ratio may be varied depending on the particular application and the ambient conditions.

Use as a repair mortar

Prepare the surfaces accordingly and prime with KEMPERTEC EP Primer, KEMPERTEC EP5 primer or KEMPERTEC AC Primer. To level out any unevenness up to a depth of 20 mm and damages, mix KEMPERTEC KR Quartz Sand Mixture in a ratio of approx. 1 : 9 with KEMPERTEC EP Primer, in a ratio of approx. 1 : 5 with KEMPERTEC EP5 primer or in a ratio of approx. 1 : 10 with KEMPERTEC AC Primer.

This ratio may be varied depending on the particular application and the ambient conditions.

PPE

Personal protective equipment should be worn. We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Disposal

solid	EWC 19 12 09
No hazardous waste. Normal disposal.	

Issued: Vellmar, 2021-04-29

KEMPERTEC 1K thinner



Uses

- For use in KEMPEROL 1K-PUR waterproofing, KEMPERDUR Deko and KEMPERDUR Deko transparent for low processing temperatures (between +10 °C and +5 °C)
- As liquid cover on opened containers of KEMPEROL 1K-PUR, KEMPERDUR Deko and KEMPERDUR Deko transparent
- Designed for horizontal surface features

Features

- Optimizes viscosity at low ambient temperatures
- Special combination of organic solvents

Pack sizes

500 ml in container

Shelf Life

Can be stored cool, frost-free, dry and unopened. Best before: see container label.

Properties

Form	Liquid
------	--------

Colour	Clear
--------	-------

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Usage guide

125 ml to maximum 250 ml for a 7 kg container of the KEMPEROL 1K-PUR waterproofing;

250 ml to maximum 500 ml for a 15 kg container of the KEMPEROL 1K-PUR waterproofing;

500 ml to maximum 1,000 ml for a 25 kg container of the KEMPEROL 1K-PUR waterproofing;

maximum 250 ml for a 6 kg container KEMPERDUR Deko;

maximum 250 ml for a 5 kg container KEMPERDUR Deko transparent.

CE marking

Component to 2

ETA 03/0043

Application

In the event of low ambient temperatures (+10 °C to +5 °C), the KEMPERTEC 1K thinner to the KEMPEROL 1K-PUR waterproofing or KEMPERDUR Deko resp. KEMPERDUR Deko transparent should be added before processing and it should be mixed well.

Personal protective equipment should be worn.

Important notes

The safety data sheets, identification of the containers, hazard statements and the safety recommendations on the containers must be observed during transportation, storage and application. The BG-Chemie technical data sheets must be observed during application.

Do not allow to enter waters, drains or to penetrate the ground.

Disposal

Liquid

EWC 07 01 04

Issued: Vellmar, 2021-04-29

KEMCO MEK Cleaning Agent



Application area

- Cleaning agent for the cleaning of existing KEMPEROL surfaces after work breaks or longer interruptions.
- To clean working equipment
- To clean substrates
- To degrease metals

Features

- Highly effective
- Highly volatile
- Organic solvent
- System-tested and adapted to the intended purpose

Storage

Cool and dry.

Pack size

2,7 l, 10 l and 27 l metal container

Consumption

depending on the degree of soiling, at least 200 g/m².

Properties

Form	Liquid
------	--------

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Application

Preparing the substrate

Apply on KEMPEROL surfaces or dirty surfaces with a cloth moistened with KEMCO MEK Cleaning Agent while avoiding the formation of puddles, remove impurities and immediately wipe up the KEMCO MEK Cleaning Agent completely again. Let the solvent of the KEMCO MEK Cleaning Agent evaporate sufficiently before you continue coating.

PPE

Personal protective equipment must be worn.

When applying the product in closed rooms, sufficient ventilation is necessary! Caution: explosion hazard!

Important note

KEMCO MEK Cleaning Agent must only be used according to its intended use as a cleaning agent for surfaces and tools.

Caution: may result in dissolving plastic surfaces (acrylic glass etc.)!

The safety data sheets, the container labelling and the danger and the safety recommendations on the containers must be complied with during transport, storage and processing; as are the chemical trade association information sheets.

Do not allow to enter waters, waste water or soil.

Disposal

liquid	EAK 07 02 04
--------	--------------

GISCODE

GF40

Issued: Vellmar, 2021-04-29

KEMCO NQ 0408 Natural Quartz



Application area

- For new buildings and repair work in combination with KEMPERTEC, KEMPEROL and KEMPERDUR
- To produce a bonding coat with the primers:
 - KEMPERTEC EP Primer,
 - KEMPERTEC EP5 primer
 - KEMCO 1K Primer
 on concrete, screed or waterproofing systems (see priming recommendations)
- As a scattering for primers
- To be scattered in KEMPERDUR TC coating
- Indoor and outdoor use

Features

- Kiln-dried
- Grading curve that is adapted to the intended purpose and compatible with the system

Pack sizes

25 kg bag

Storage

Cool and dry.

Consumption

In order to create a bonding bridge: at least 2 kg/m²

For spreading in the primer: at least 2 kg/m²

For spreading in the KEMPERDUR® TC: at least 3-5 kg/m²

Properties

Form	Granular /solid
------	-----------------

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

CE marking

Component to 4	ETA 03/0025
	ETA 03/0026
	ETA 03/0043
	ETA 03/0044

Application

Use as a bonding coat

Substrates like concrete, screed or KEMPEROL waterproofings must be level, dry, firm and free of from any substances which may hinder adhesion. Prepare the surfaces accordingly and prime with KEMPERTEC EP Primer or KEMPERTEC EP5 primer. Scatter approx. 2 kg/m² of KEMCO NQ 0408 Natural Quartz into the still wet primer as a bonding coat. As a bonding coat on KEMPEROL Waterproofing systems for the subsequent KEMCO Decor Stone / Natural Stones also KEMCO 1K Primer can be used.

As scattering

See technical data sheet KEMPERDUR TC coating resp. the data sheet of the respective primer.

PPE

Personal protective equipment must be worn.

We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Disposal

solid	EAK 19 12 09
No hazardous waste, disposal as domestic waste.	

Issued: Vellmar, 2021-04-29

KEMCO NQ 0712 Natural Quartz



Application area

- For new buildings and repair work in combination with KEMPERTEC, KEMPEROL and KEMPERDUR
- To produce a protection against alkalinity with the primers:
 - KEMPERTEC AC Primer,
 - KEMPERTEC EP Primer,
 - KEMPERTEC EP5 primer
- To be scattered in KEMPERDUR TC coating
- Indoor and outdoor use

Features

- Kiln-dried
- Grading curve that is adapted to the intended purpose and compatible with the system

Pack sizes

25 kg bag

Storage

Cool and dry.

CE marking

Component to 4	ETA 03/0025
	ETA 03/0026
	ETA 03/0043
	ETA 03/0044

Consumption

As alkaline protection layer: at least 0.5 kg / m²

In KEMPERDUR TC coating: at least 3 kg / m²

Application

As scattering

See technical data sheet KEMPERDUR TC coating resp. the data sheet of the respective primer.

Application as alkaline protection

To protect the KEMPEROL waterproofing systems against alkaline media apply a coat of KEMPERTEC EP Primer, KEMPERTEC EP5 primer or KEMPERTEC AC Primer according to TI 15 - Alkalinity. The still wet layer is scattered with KEMCO NQ 0712 Natural Quartz leaving no gaps and in grain-to-grain contact (consumption min. 0.5 kg/m²).

PPE

Personal protective equipment must be worn.

We recommend a hand protection and skin protection plan adapted to the workplace. Clean the tools immediately after use with KEMCO MEK Cleaning Agent.

Disposal

solid EAK 19 12 09

No hazardous waste, disposal as domestic waste.

Issued: Vellmar, 2021-04-29

KEMCO TX Thixotropic Additive



Application area

- As a thixotropic agent for KEMPEROL 2K-PUR waterproofing and KEMPERTEC EP-/EP5 Primer
- As adjusting agent (thixotropic agent) for the coating systems KEMPERDUR AC coating and KEMPERDUR® TC In case of a slope of 3 - 20 %
- As a thixotropic agent for the surfacing system KEMCO Decor Stone / Natural Stones and for vertical application.

Features

- Improvement of stability of the coating systems KEMPERDUR AC and KEMPERDUR® TC for suitable surfaces
- Reduces self-levelling and prevents running on ramps and inclined surfaces

Pack sizes

4 * 150 g-bags

Storage

Cool and dry.

Consumption

The consumption depends on:

- Degree of slope/gradient
- Condition of the substrate
- Temperature

Properties

Form Powder

* Values obtained at a temperature of 23 °C - 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

Curing

for KEMPERDUR AC coating

pack	Slope	Quantity	thixotropic agent
33 kg	3 - 5 %	0.1 mass%	for comp. A (approx. 10 g)
33 kg	5 - 7 %	0.2 mass%	for comp. A (approx. 20 g)
33 kg	7 - 10 %	0.3 mass%	for comp. A (approx. 30 g)
33 kg	11 - 20 %	0.6 mass%	for comp. A (approx. 60 g)

For KEMPERDUR TC coating

pack	Slope	Quantity	thixotropic agent
20 kg	3 - 20 %	2 mass%	for comp. A (approx. 150 g)
12.5 kg	3 - 20 %	2 mass%	for comp. A (approx. 90 g)

For KEMCO Decor Stone / Natural Stones

pack	Quantity thixotropic agent
1,75 kg KEMCO QB1 Binder	8 mass%

for KEMPEROL 2K-PUR waterproofing

pack	Slope	Quantity	thixotropic agent
12.5 kg	vertical	1.25 mass%	approx. 150 g

For KEMPERTEC EP/ EP5 Primer

pack	Slope	Quantity	thixotropic agent
10 kg	vertical	4.5 mass%	approx. 3 * 150 g
3 kg	vertical	5 mass%	approx. 150 g

Application

When adding KEMPERDUR AC coating:

After determining the required amount, the KEMCO TX Thixotropic Agent is stirred well with a slow-running agitator in the component A of the KEMPERDUR AC coating stirred well. After that, the KEMPERDUR AC filler (component C) should be added and the mixture must be repotted. After repotting, the corresponding quantity KEMPEROL CP catalyst powder (See Technical information sheet KEMPERDUR AC coating) is stirred well in the mass.

When adding KEMPERDUR TC coating:

Depending on the size of the working package, the required quantity of KEMCO TX Thixotropic Agent is stirred well using a slow-moving stirrer into component A of the KEMPERDUR TC coating stirred well. Then add component B and transfer the mixture into a new container. Then add component C and mix thoroughly once more.

PPE

Personal protective equipment must be worn.

Especially when working with the thixotropic additive, we recommend that you use a dusk mask.

Note

Please observe the Technical Information TI 30 - Application of KEMPEROL on vertical surfaces.

Important note

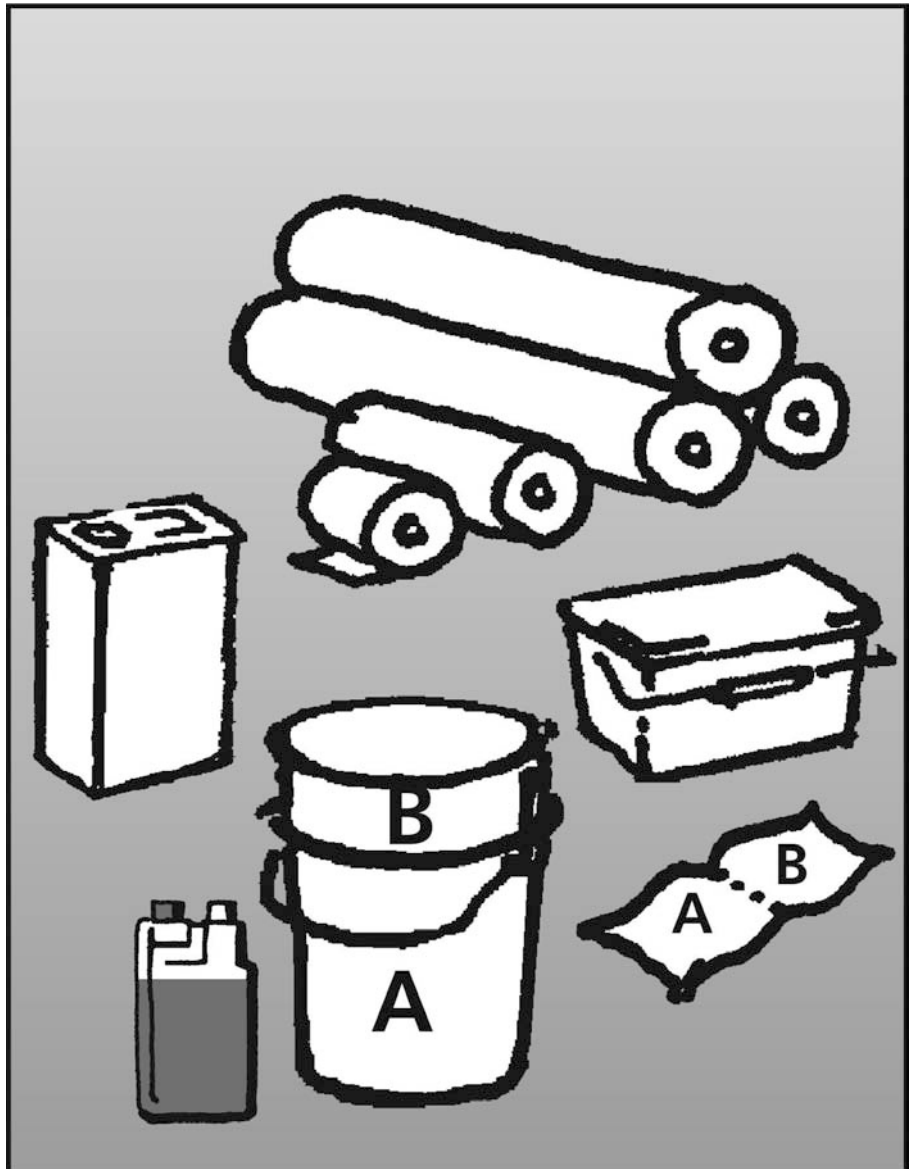
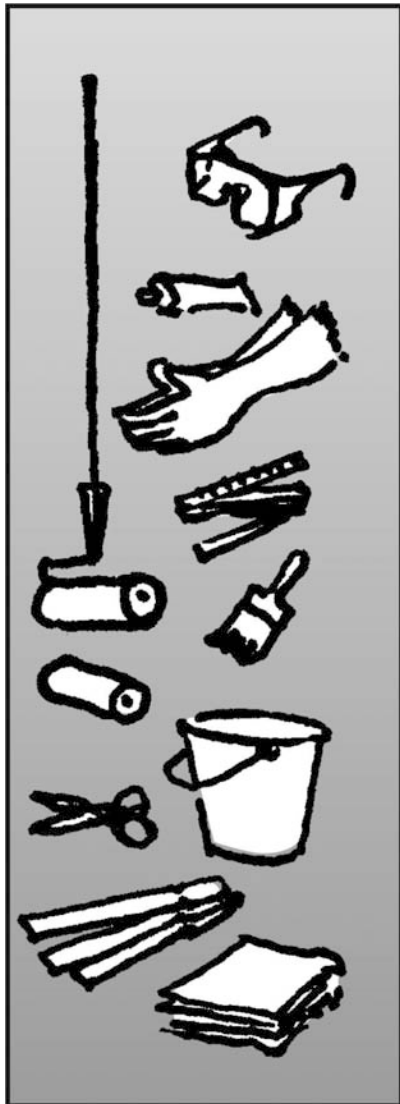
The safety data sheets, the container labelling and the danger and the safety recommendations on the containers must be complied with during transport, storage and processing; as are the chemical trade association information sheets.

Do not allow to enter waters, waste water or soil.

Disposal

solid EAK 19 12 09

Issued: Vellmar, 2021-04-29

Instructions for use KEMPEROL 2K-PUR

Goggles,
gloves, folding ruler,
nylon roller with handle,
special brush, scissors,
mixing container, stirring
sticks,
cloth

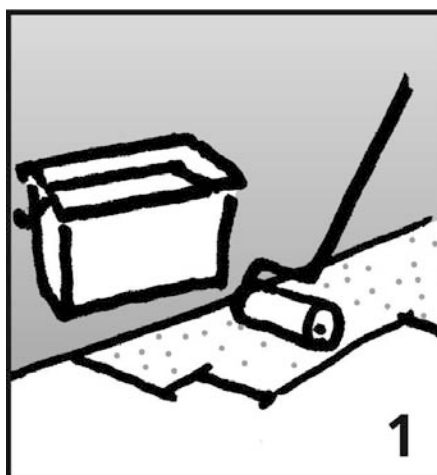
KEMPEROL 2K-PUR container with comp. A and B,
(KEMPEROL 2K-PUR Speedshot),
KEMPERTEC Primer according to the priming recommendation,
KEMPEROL Fleece,
KEMCO MEK Cleaning Agent

Substrates

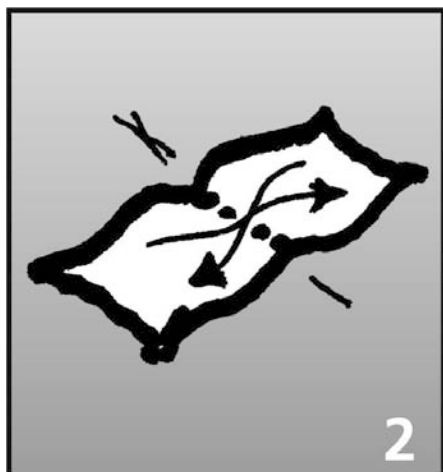
must be dry (residual moisture in concrete in the upper 2 cm < 5%), capable of withstanding loads and free from materials that may hinder adhesion, and must be appropriately prepared.

Priming

Prime as per priming recommendations. Please observe the dew point!

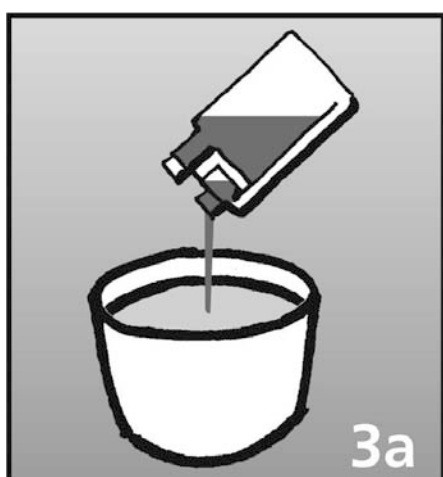
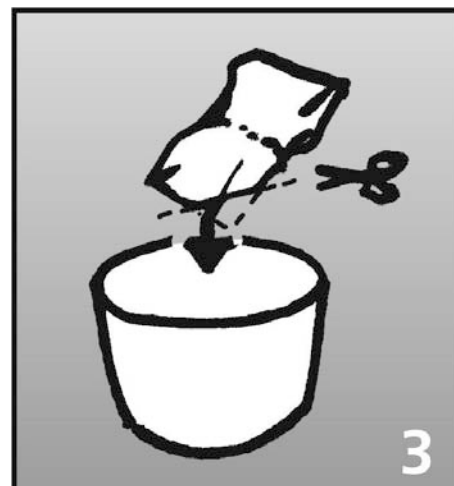


Porous, absorbent substrates must be pre-treated with a 2-component KEMPERTEC Primer. Non-absorbent substrates do not need to be primed, except for junction areas. Mask off adjoining areas and protect them against contact with KEMPEROL 2K-PUR.



Waterproofing in sachet

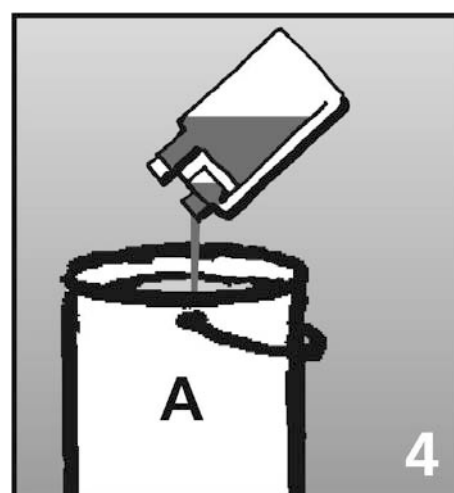
Knead the KEMPEROL 2K-PUR waterproofing in the sachet thoroughly as set out in the instructions and transfer the waterproofing into a separate container.



Temperature

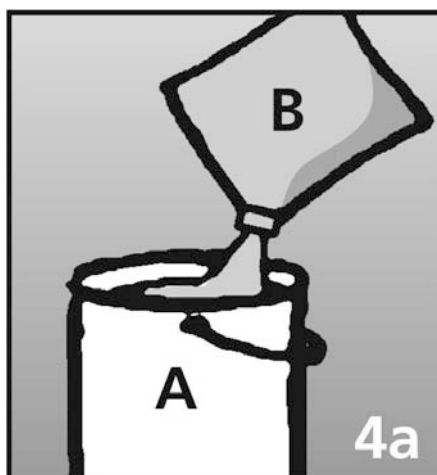
Only apply waterproofing at substrate temperatures exceeding +5°C! Please observe the dew point!

At temperatures below +10°C, KEMPEROL 2K-PUR Speedshot is added to the waterproofing mixture or to component A (see 3a/4).



Waterproofing in container

Add component B (hardener) to component A. Scrape out the component B container until it is completely empty and mix both components thoroughly to obtain a streak-free mixture free of bubbles.



New container

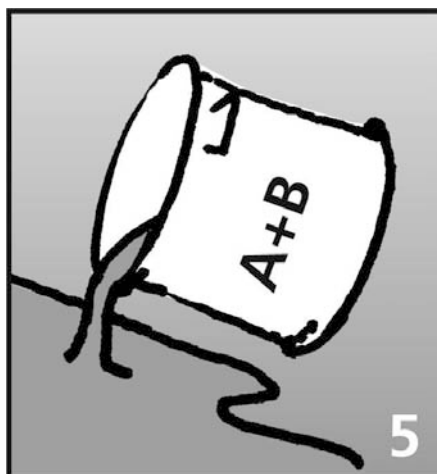
To avoid mixing errors, transfer to a different container and mix again with a slowly rotating mixer for approx. 1 min.

First layer

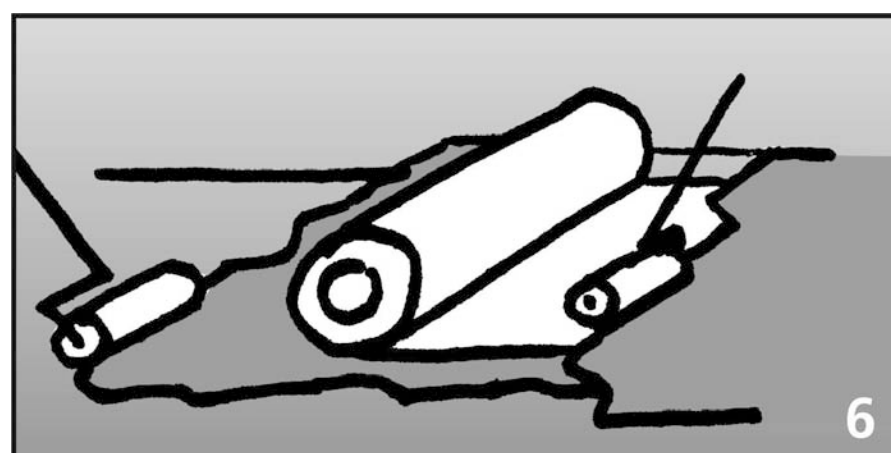
Apply approx. 2/3 of KEMPEROL 2K-PUR waterproofing to the surface and distribute it evenly with a nylon roller.

Fleece

Roll out the KEMPEROL Fleece directly into the liquid first layer of KEMPEROL 2K-PUR, allowing for 5 cm overlaps.



In case of subsequent coating with KEMPERDUR products, the KEMPEROL Fleece should be laid in butt jointed application using KEMCO RS Reinforcement Strip.



Second layer

Roll out the KEMPEROL Fleece and embed it with a roller, taking care to remove any air bubbles. Apply approx. 1/3 of KEMPEROL 2K-PUR waterproofing to the still wet first coat, ensuring complete saturation of the fleece. Avoid accumulations of material.

Alkaline protection

to the waterproofing and scatter KEMCO NQ 0712 Natural Quartz (refer to Technical Information TI 15 - Alkalinity).

The waterproofing provides limited alkaline resistance. Therefore, if a sustained load is expected, apply KEMPERTEC EP Primer, KEMPERTEC EP5 primer or KEMPERTEC AC Primer

Important:

Personal protective equipment (PPE) must be worn!

Note:

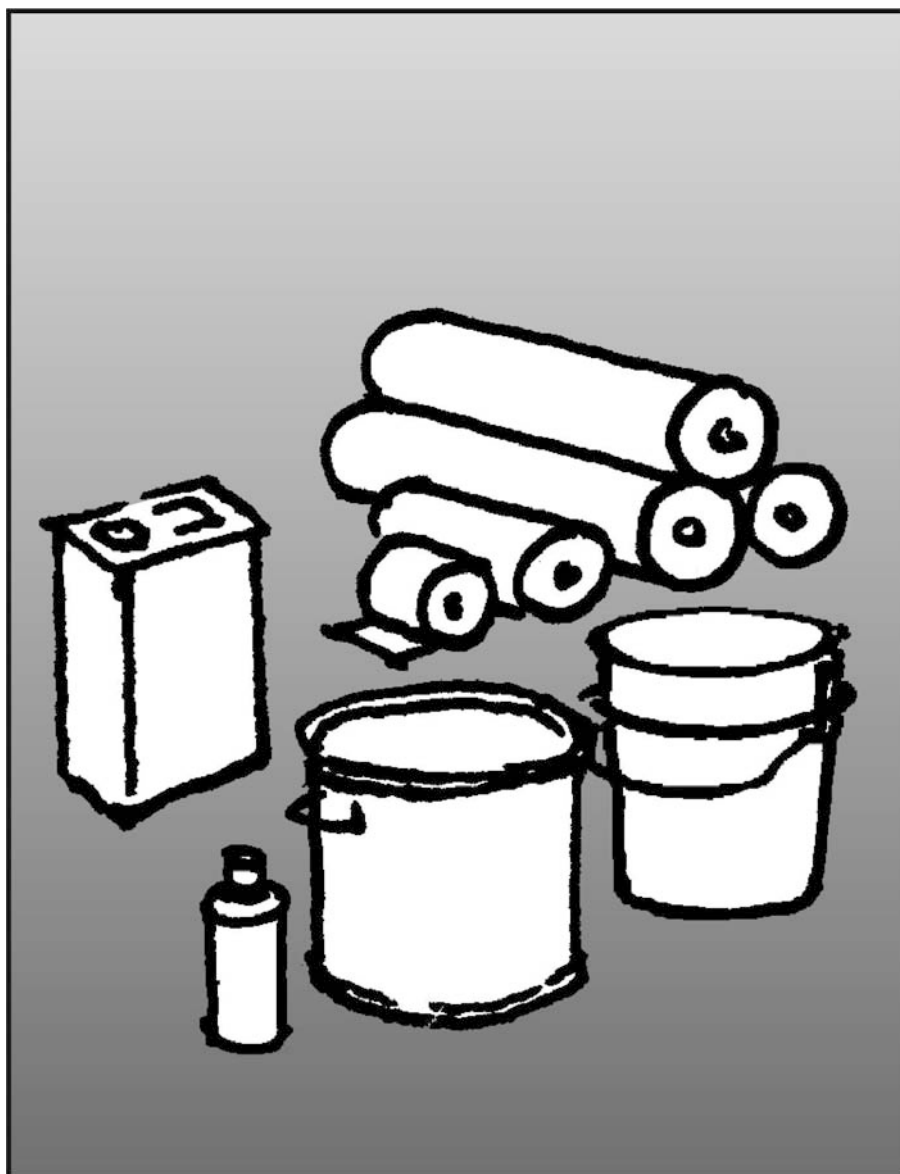
Connections to door and window elements etc. with a height of <15 cm (from upper edge of coating) should have at least 5 cm of overlap, connections and joints to third party products have to be produced with an overlap of at least 10cm.

In regard to the layer thicknesses, the minimum ETA requirements must be fulfilled. Further national regulations must be observed.

Issued: Vellmar, 2021-04-29

Instructions for use KEMPEROL 1K-PUR

Goggles, gloves, folding ruler, nylon roller with handle, special brush, cloth, scissors, stirring sticks



KEMPEROL 1K-PUR waterproofing,
(KEMPERTEC 1K thinner),
KEMPERTEC Primer according to priming recommendation,
KEMPEROL Fleece,
KEMCO RS Reinforcement Strip,
KEMCO MEK Cleaning Agent



Substrates

must be level, capable of withstanding loads, dry (residual moisture in the upper 2 cm of concrete < 5%), free of loose parts, dust and grease, i.e. free from materials that may hinder adhesion.

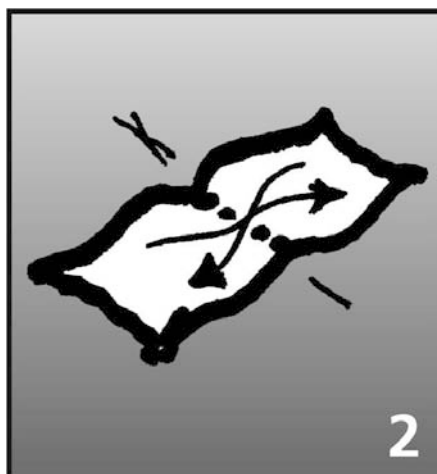


Pre-treat the substrate as per the priming recommendations.

Level out any unevenness according to the manufacturer's instructions. Mask off adjoining areas and protect them against contact with KEMPEROL 1K-PUR.

Primer (sachet)

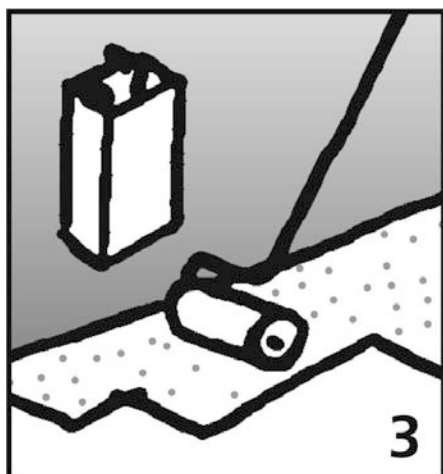
Knead the KEMPERTEC Primer into the sachet thoroughly as set out in the instructions, cut off one corner, and apply the KEMPERTEC Primer quickly and efficiently to the surface.



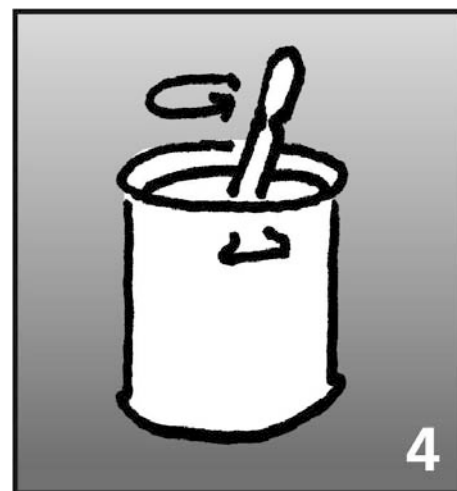
Primer (container)

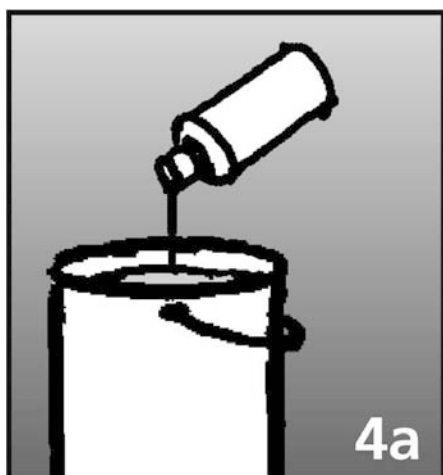
KEMPERTEC Primer in container (without illustration): Stir comp. A thoroughly. Mix comp. B with a stirring stick thoroughly into comp. A to obtain a streak- and bubble-free mixture.

KEMCO 1K Primer: Open container and apply the primer.



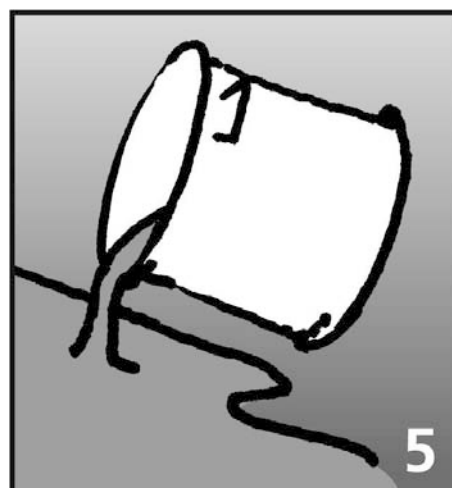
KEMPEROL 1K-PUR water-proofing to be stirred with a stirring stick until free from streaks. The result should be a uniform colour (remove any skin that may have formed).





Temperature

Only apply waterproofing at substrate temperatures exceeding +5°C! Please observe the dew point! At low temperatures (+10°C to +5°C) KEMPERTEC 1K thinner may have to be added.

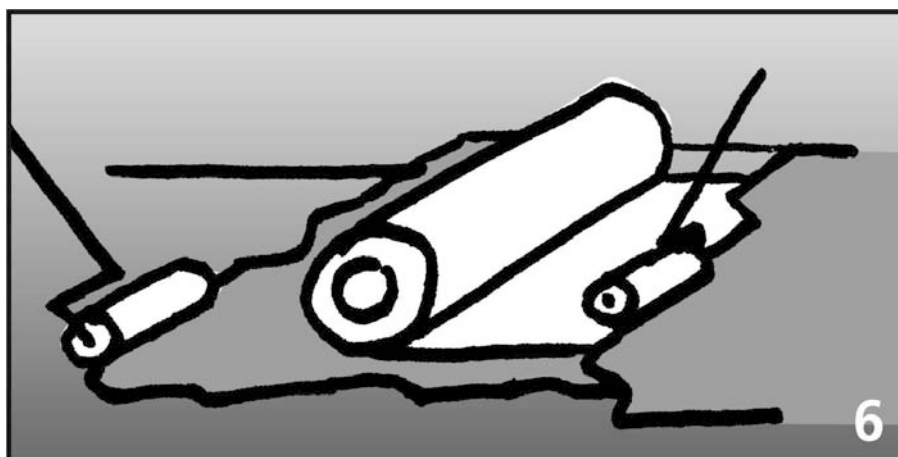


First layer

Apply approx. 2/3 of KEMPEROL 1K-PUR to the surface and distribute it evenly with a nylon roller.

Fleece

Roll out the KEMPEROL Fleece directly into the liquid first layer of KEMPEROL 1K-PUR, allowing for 5 cm overlaps.



In case of subsequent coating with KEMPERDUR products, the KEMPEROL Fleece should be laid in butt jointed application using KEMCO RS Reinforcement Strip.

Second layer

Roll out the KEMPEROL Fleece and embed it with a roller, taking care to remove any air bubbles. Apply approx. 1/3 of KEMPEROL 1K-PUR waterproofing to the still wet first coat, ensuring complete saturation of the fleece. Avoid accumulations of material.

Alkaline protection

The waterproofing provides limited alkaline resistance. Therefore, if a sustained load is expected, apply – after a period of 7 days – KEMPERTEC EP-, KEMPERTEC EP5 or KEMPERTEC AC Primer

as a protection against alkalinity to the waterproofing and scatter KEMCO NQ 0712 Natural Quartz (refer to Technical Information TI 15 - Alkalinity).

Important:

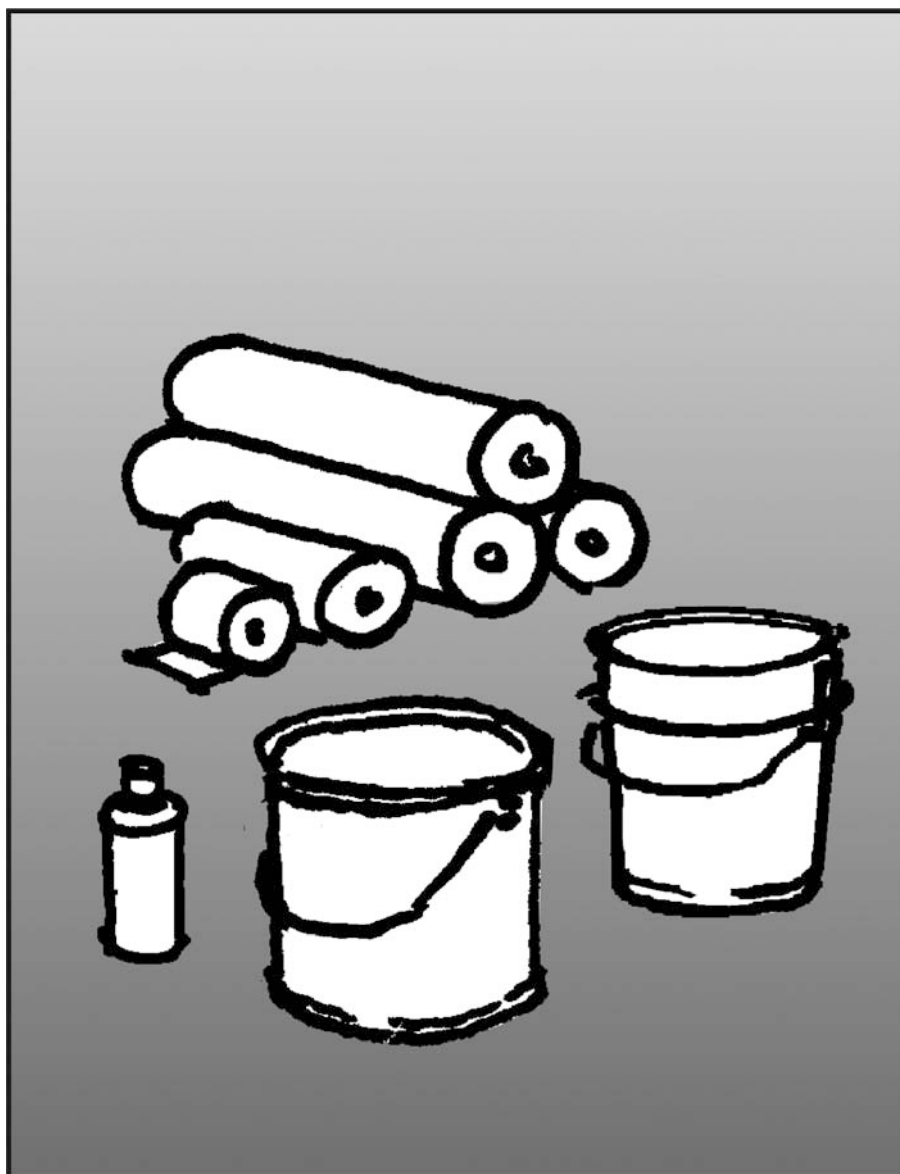
Personal protective equipment (PPE) must be worn!

Note:

Connections with door and window elements etc. < 15 cm above the water run-off level must have a skirting at least 5 cm high, connections with the waterproofing membrane should be made with at least 10 cm of overlap.

In regard to the layer thicknesses, the minimum ETA requirements must be fulfilled. Further national regulations must be observed.

Issued: Vellmar, 2021-04-29

Instructions for use KEMPEROL 1K-SF

Goggles, gloves, folding ruler, nylon roller with handle, special brush, cloth, scissors, stirring sticks

KEMPEROL 1K-SF,
KEMPERTEC Primer according to the priming recommendation,
KEMPEROL 165 fleece,
KEMCO MEK Cleaning Agent

Substrates

must be level, firm and free from contaminants which may affect adhesion and must be prepared accordingly.

Due to the humidity tolerance of the material KEMPEROL 1K-SF can be applied to slightly damp substrates.

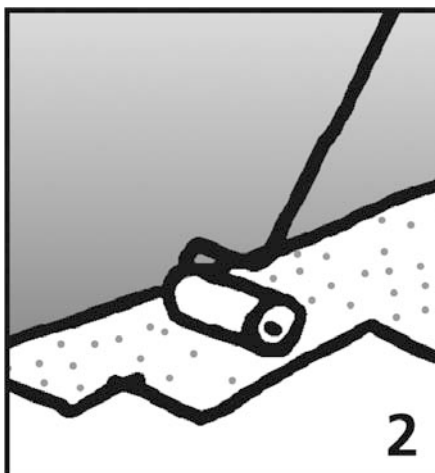


Pre-treat substrates according to the Technical Data Sheet.

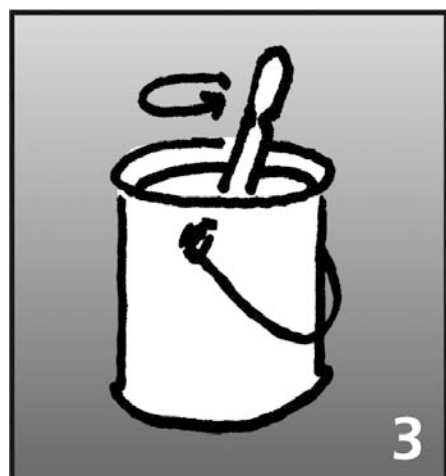
Level out any unevenness according to the manufacturer's instructions. Mask off adjoining areas and protect them against contact with KEMPEROL 1K-SF.

Priming

A primer is not required for all substrates. In general, the priming recommendations for KEMPEROL 1K-SF must be respected.

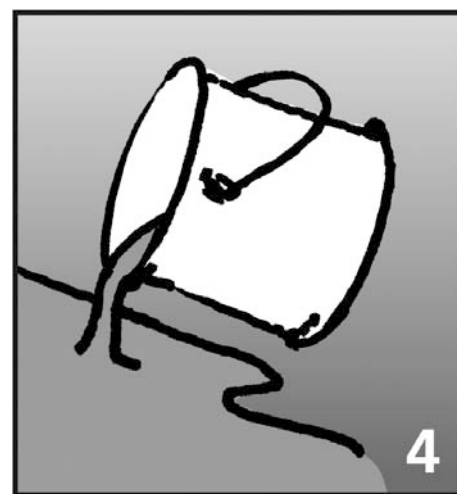


KEMPEROL 1K-SF to be stirred with a stirring stick until free from streaks. The result should be a uniform colour (remove any skin that may have formed).



Temperature

Only apply waterproofing at substrate temperatures exceeding +5°C! Please observe the dew point!

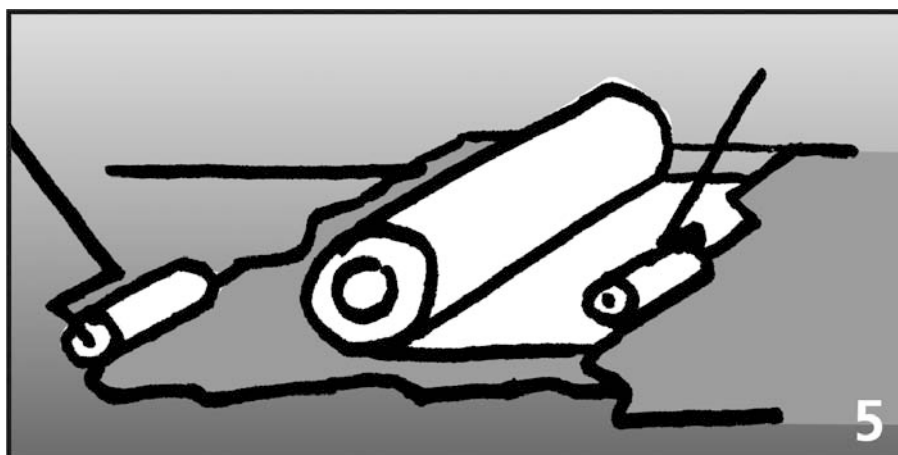


First layer

Apply approx. 2/3 of KEMPEROL 1K-SF to the surface and distribute it evenly with a nylon roller.

Fleece

Roll out the KEMPEROL 165 fleece directly into the liquid first layer of KEMPEROL 1K-SF, allowing for 5 cm overlaps.

**Second layer**

KEMPEROL 165 fleece to be rolled in, taking care to remove any air bubbles. Apply approx. 1/3 of KEMPEROL 1K-SF to the still wet first coat, ensuring complete saturation of the fleece. Avoid accumulations of material.

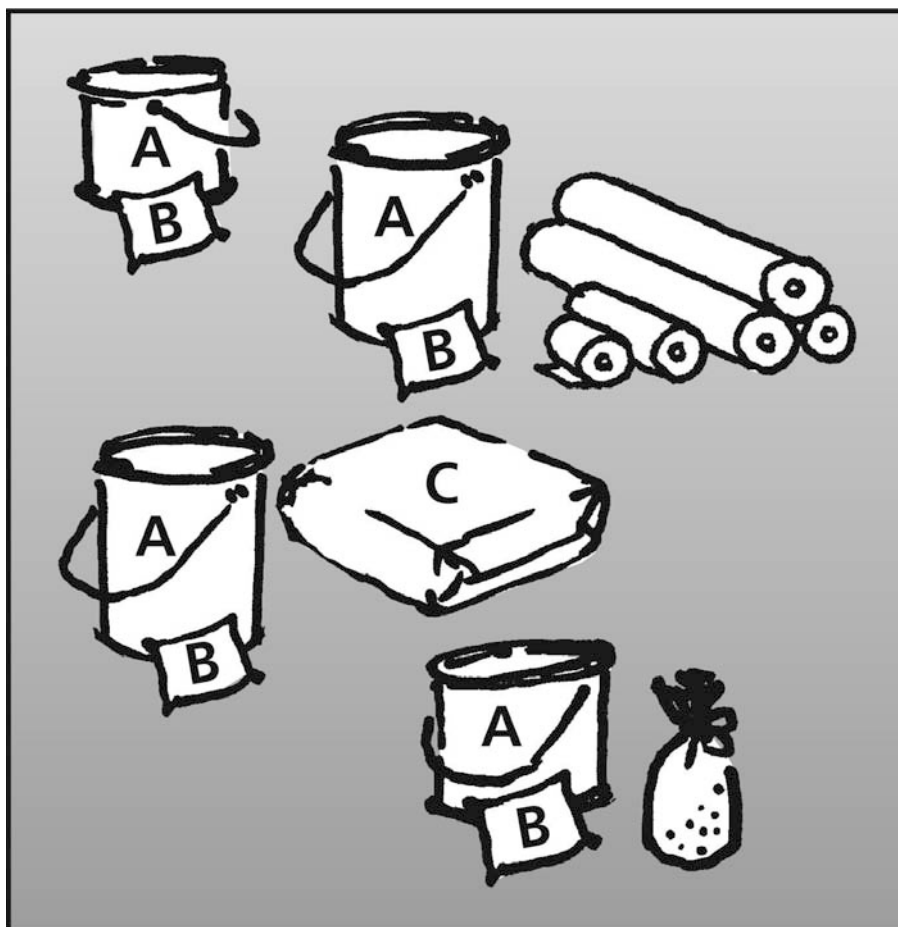
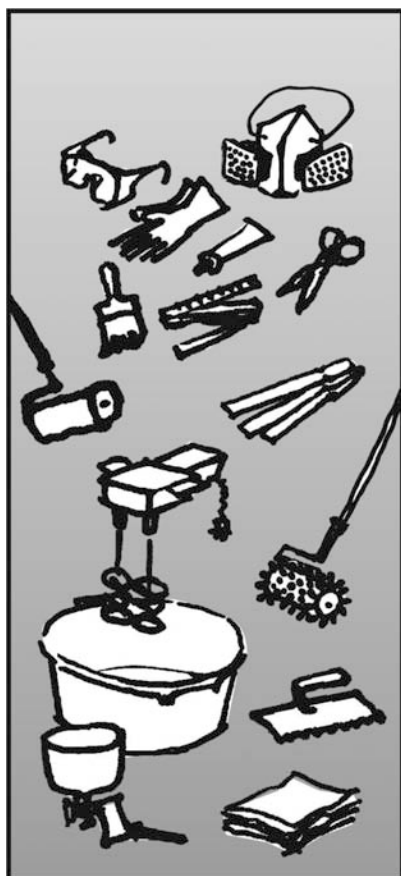
Note:

Connections to door and window elements etc. with a height of <15cm (from upper edge of the coating) should have at least 5cm of overlap. Connections to the surface sealant and third party products should be made with at least a 10cm of overlap.

In regard to the layer thicknesses, the minimum ETA requirements must be fulfilled. Further national regulations must be observed.

Important: Personal protective equipment must be worn!

Issued: Vellmar, 2021-04-29

Instructions for use KEMPERTEC, KEMPEROL and KEMPERDUR AC products

Goggles, breathing mask with A2 filter, gloves, scissors, wooden stirring sticks, spiked roller, nylon roller, ruler, special brush, positive mixer, mortar drum, 6 mm notched trowel, chip gun, cleaning cloths

KEMPERTEC AC Primer (component A),
+ KEMPEROL CP catalyst powder (component B),
KEMPEROL AC Speed /AC Speed+ (component A),
+ KEMPEROL CP catalyst powder (component B),
KEMPEROL 165 fleece,
KEMPERDUR AC coating (component A),
+ KEMPEROL CP catalyst powder (component B),
KEMPERDUR AC filler (component C),
KEMPERDUR AC-Finish (component A),
+ KEMPEROL CP catalyst powder (component B),
KEMPERDUR CS Microchips

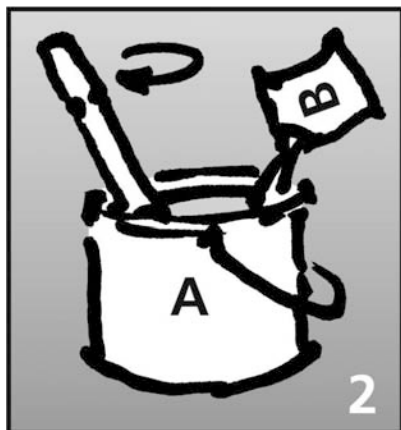
KEMPERTEC AC Primer



Substrates

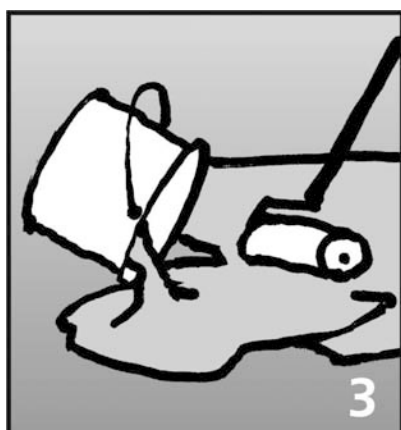
must be level, capable of withstanding loads, dry (residual moisture in the upper 2 cm of concrete < 5%), free of loose parts, dust and grease, i.e. free from materials that may hinder adhesion. Pay special attention to the dew point!

In the event of work interruptions longer than 24 h, all joint areas must be cleaned with KEMCO MEK Cleaning Agent. Mask off adjoining areas and protect them against contact with KEMPEROL AC Speed .



Mixing

The KEMPERTEC AC Primer must only be used in combination with KEMPEROL CP catalyst powder. Adjust the quantity of hardener added to suit the respective material temperature (see table: KEMPERTEC AC Primer). Stir briefly but thoroughly and pour the mixture into a new container.



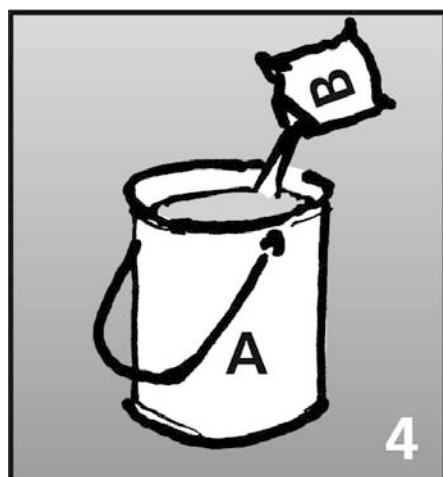
Application

The KEMPERTEC AC Primer must be distributed evenly on the surface immediately after mixing with KEMPEROL CP catalyst powder. Prime the surface until complete saturation in just one application using a nylon roller or a rubber bladed spreader. After using a rubber bladed spreader, always go over the surface again with a nylon roller to avoid material accumulation. Do not apply more than 750 g/m².

Material temperature [°C]	Quantity to be added KEMPEROL CP catalyst powder				KEMPERTEC AC Primer	
	20 g bags to 1 kg	20 g bags to 3 kg	100 g bags to 5 kg	in %	Pot life in container [min.]	Surface cured [min.]
- 5	2 bags	6 bags	2 bags	4 %	25	60

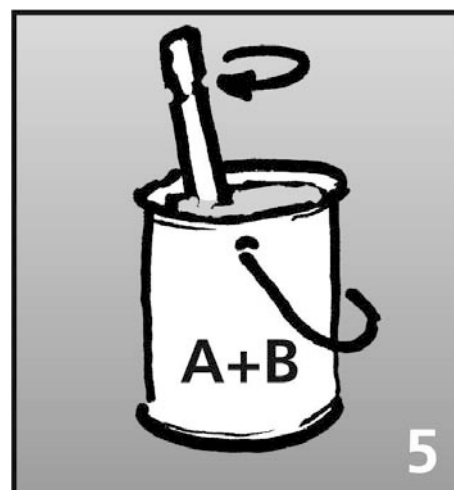
Material temperature [°C]	Quantity to be added KEMPEROL CP catalyst powder				KEMPERTEC AC Primer	
	20 g bags to 1 kg	20 g bags to 3 kg	100 g bags to 5 kg	in %	Pot life in container [min.]	Surface cured [min.]
0	2 bags	6 bags	2 bags	4 %	20	50
+ 5	2 bags	6 bags	2 bags	4 %	18	45
+ 10	2 bags	6 bags	2 bags	4 %	15	30
+ 20	1 bags	3 bags	1 bags	2 %	15	30
+ 30	1/2 bags	1 bags	1/2 bags	1 %	10	15

KEMPEROL AC Speed for surfaces / AC Speed+ waterproofing for connections

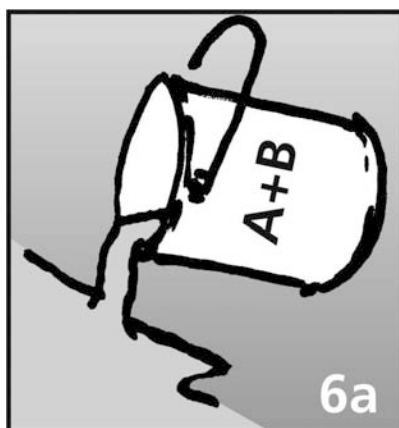


Mixing

KEMPEROL AC Speed / AC Speed+ must only be used in combination with KEMPEROL CP catalyst powder. Adjust the quantity of catalyst added to suit the respective material temperature (see table below). Stir briefly but thoroughly and pour the mixture into a new container.



Material temperature [°C]	Quantity to be added KEMPEROL CP catalyst powder			KEMPEROL AC Speed / AC Speed+ Waterproofing	
	100 g bag for 15 kg KEMPEROL AC Speed	100 g bag for 10 kg KEMPEROL AC Speed+	in %	Pot life in container [min.]	Surface cured [min.]
- 5	6 bags	4 bags	4 %	60	90
0	6 bags	4 bags	4 %	45	80
+ 5	6 bags	4 bags	4 %	35	70
+ 10	6 bags	4 bags	4 %	30	60
+ 20	3 bags	2 bags	2 %	20	35
+ 30	1 1/2 bags	1 bags	1 %	20	30



Application surface

KEMPEROL AC Speed must be applied immediately after mixing with KEMPEROL CP catalytic converter powder.

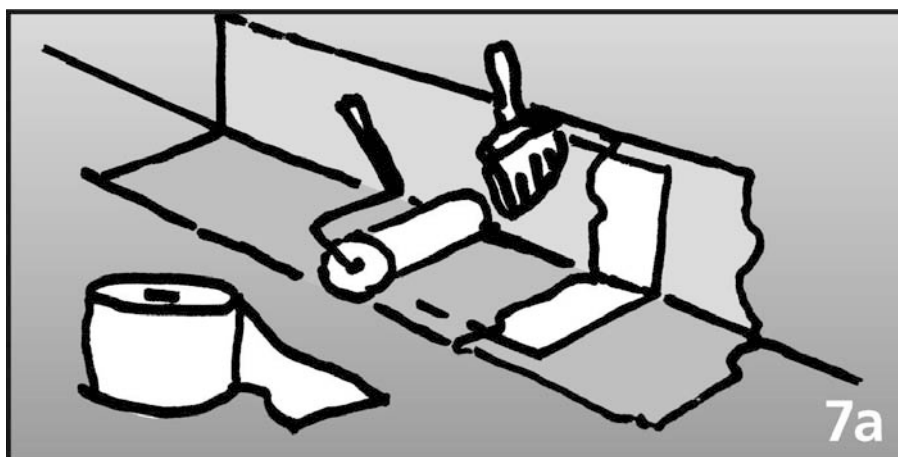
KEMPEROL AC Speed is applied evenly as a first layer using a nylon roller or special brush. KEMPEROL 165 fleece is rolled out and embedded in the resin, taking care to remove any creases and air bubbles. Apply more resin until complete saturation of the fleece. The fleece is rolled directly into the liquid KEMPEROL AC Speed with a 5 cm overlap. Ratio of initially and subsequently applied material: 2/3 to 1/3.

Consumption: at least 2.5 kg / m².

Application connections

KEMPEROL AC Speed+ has a higher viscosity. Therefore, it is particularly suitable for the safe waterproofing of connections and details.

KEMPEROL AC Speed+ must be applied immediately after mixing with KEMPEROL CP catalytic converter powder.



KEMPEROL AC Speed+ is applied evenly as a first layer using a nylon roller or special brush.

KEMPEROL 165 fleece is rolled out and embedded in the resin, taking care to remove any creases and air bubbles. Apply more resin until complete saturation of the fleece.

Ratio of initially and subsequently applied material: 2/3 to 1/3. Usage guide: approx. 2.5 kg/m².

Note:

Connections to door and window elements etc. with a height of <15 cm (from

upper edge of the water-bearing level) should have at least 5 cm of overlap. Connections to the surface sealant should be made with at least a 10 cm of overlap.

Properties KEMPEROL AC Speed / AC Speed+ Waterproofing

Working time*[min.]

(2% KEMPEROL CP catalytic converter powder).....

approx. 20

Rainproof after [min.].....

approx. 35

Can be walked on* after

approx. 35

[min.].....

Next coat can be applied* after [min.].....

approx. 60

with mastic asphalt [d].....

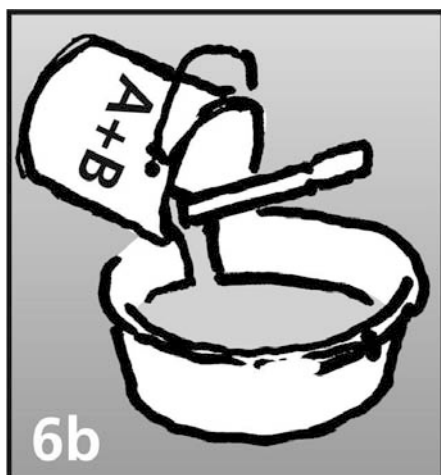
approx. 1

Short term temperature resistance [°C].....

250

* Values obtained at a temperature of 20 °C – 50% rel. humidity. These values vary depending on the weather conditions, such as wind, humidity and temperature.

KEMPERDUR AC coating



Mixing

KEMPERDUR AC (component A) and KEMPEROL CP catalytic converter powder (component B) must be stirred thoroughly and then the mixture must be transferred into a new container.

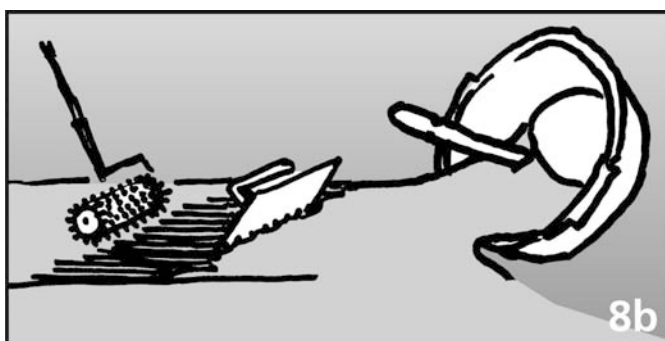
Add KEMPERDUR AC filler (component C) and use a positive mixer to stir it in thoroughly.



Application

Spread KEMPERDUR AC coating over the whole area. In one operation, apply with a 6 mm notched trowel and draw off with the smooth side. Use a spiked roller to remove any air bubbles.

Consumption: at least 5.2 kg/m².



After curing

(approx. 60 min) the surface will be sealed with KEMPERDUR AC-Finish (figures 9, 10, 11). Add KEMCO TX Thixotropic Additive for ramps and slopes with a gradient of between 3% and 20%

to prevent running. Stir required amount of KEMCO TX Thixotropic Additive (see table) with a slow running mixing device into component A of KEMPERDUR AC coating.

Then add KEMPERDUR AC filler (comp. C) and transfer the mixture into a new container. After placing the mixture in another container, stir the corresponding quantity of KEMPEROL CP catalytic converter powder thoroughly into the mixture.

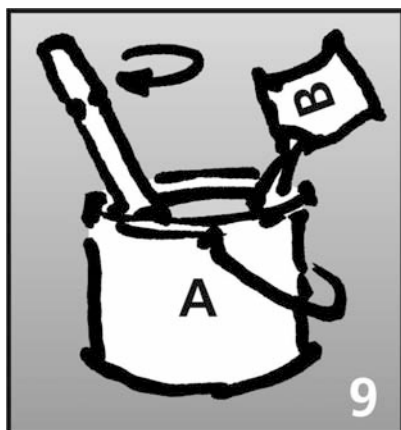
KEMCO TX Thixotropic Additive for KEMPERDUR AC coating

Pack	Slope	Quantity Thixotropic Agent
33 kg	3 - 5 %	0,1 by weight of comp. A (approx. 10 g)
33 kg	5 - 7 %	0,2 by weight of comp. A (approx. 20 g)
33 kg	7 - 10 %	0,3 by weight of comp. A (approx. 30 g)

KEMCO TX Thixotropic Additive for KEMPERDUR AC coating

Pack	Slope	Quantity Thixotropic Agent
33 kg	11 - 20 %	0,6 by weight of comp. A (approx. 60 g)

KEMPERDUR AC-Finish and KEMPERDUR CS Microchips

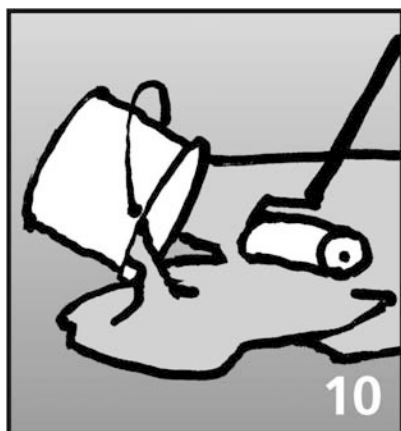


Mixing

KEMPERDUR AC-Finish must only be used in combination with KEMPEROL CP catalytic converter powder. Adjust the quantity of hardener added to suit the respective material temperature (see table KEMPERDUR AC-Finish).

Stir briefly but thoroughly.

Material temperature [°C]	Quantity to be added KEMPEROL CP catalytic converter powder		KEMPERDUR AC-Finish	
	100 g bag to 5 kg	in %	Pot life in container [min.]	Surface cured [min.]
+ 5	2 bags	4 %	35	60
+ 10	2 bags	4 %	30	45
+ 20	1 bags	2 %	20	30
+ 30	1/2 bags	1 %	20	30



Application

The KEMPERDUR AC-Finish must be distributed evenly on the surface immediately after mixing with KEMPEROL CP catalytic converter powder. Apply evenly in one operation using a nylon roller.

Consumption: at least 0.6 kg / m²

Only apply at substrate and ambient temperatures of below 30°C to achieve a seamless and streak free surface (store materials at room temperature).

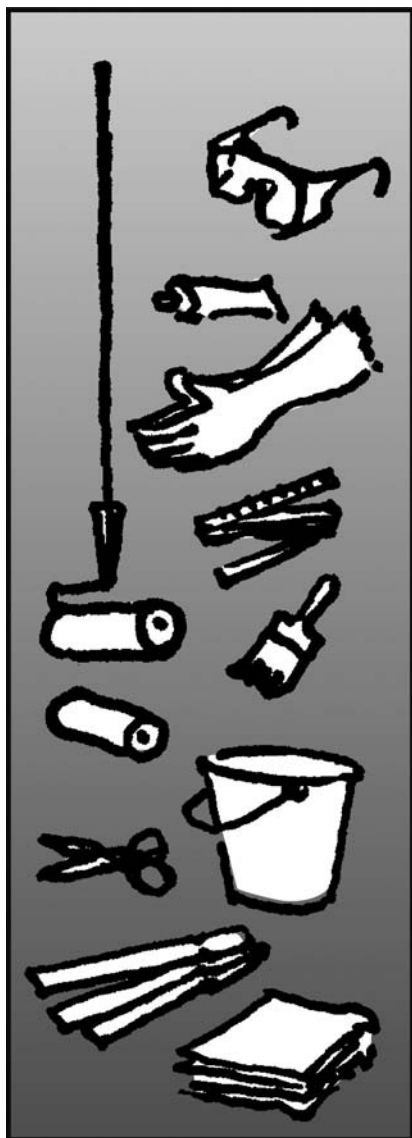


KEMPERDUR CS Microchips

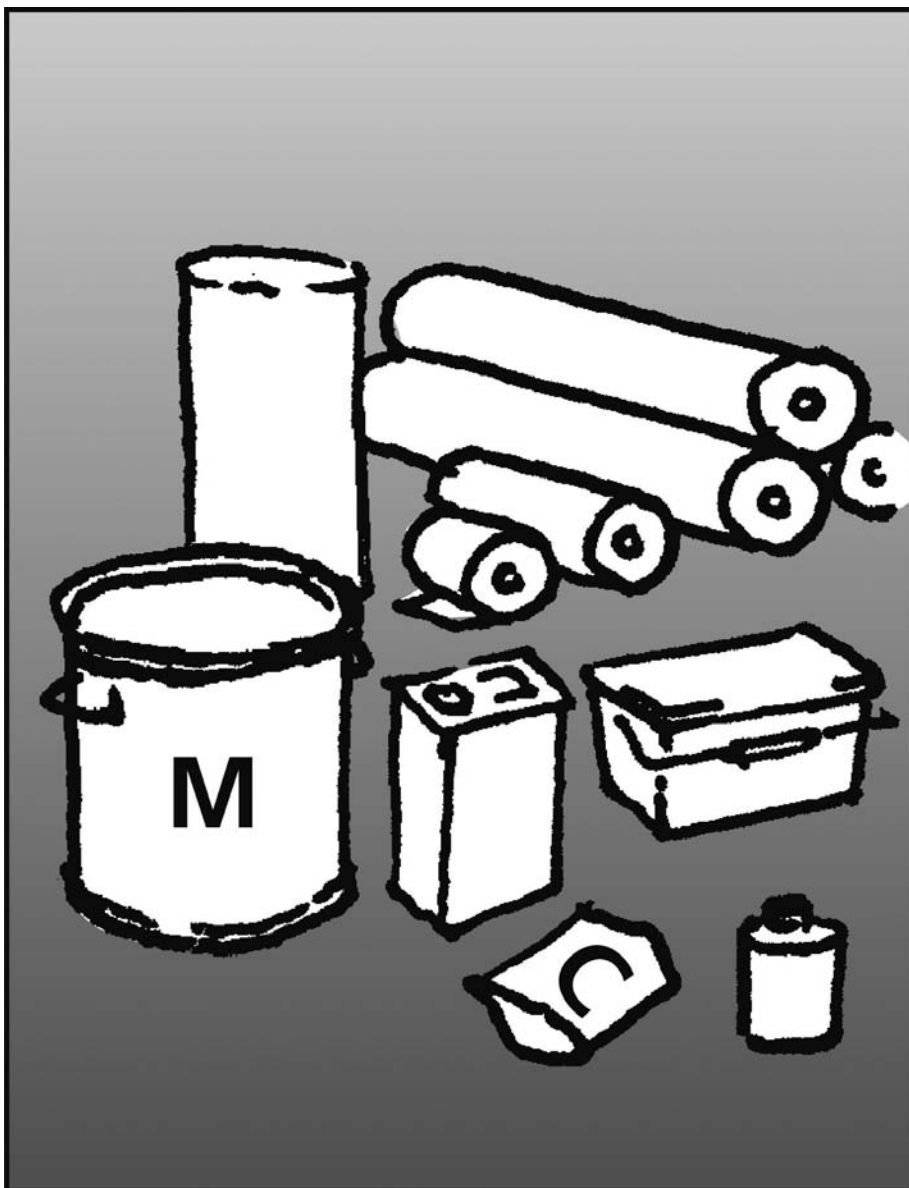
To create a decorative surface, the KEMPERDUR CS Microchips can be blown evenly onto the still wet material using a chip gun or sprinkled onto the surface by hand.

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Instructions for use KEMPEROL V 210 M



Goggles, gloves, folding ruler, nylon roller with handle, special brush, scissors, mixing container, stirring sticks, cloth



KEMPEROL V 210 M waterproofing (comp. M),
 KEMPEROL CP catalyst powder (comp. C),
 KEMPEROL UP-I inhibitor or KEMPEROL UP-A cold activator,
 KEMPEROL Fleece,
 KEMPERTEC Primer according to the priming recommendation,
 KEMCO MEK Cleaning Agent,
 KEMPEROL TP talcum

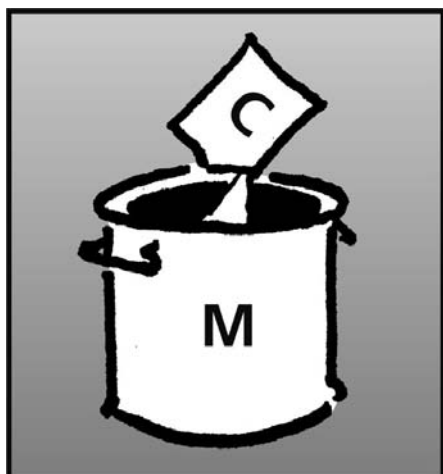
Substrates

must be level, load-bearing, dry (residual moisture in concrete in the upper 2 cm <5%) and free of adhesion-hindering substances. Pretreat the substrate in accordance with the recommended primer.



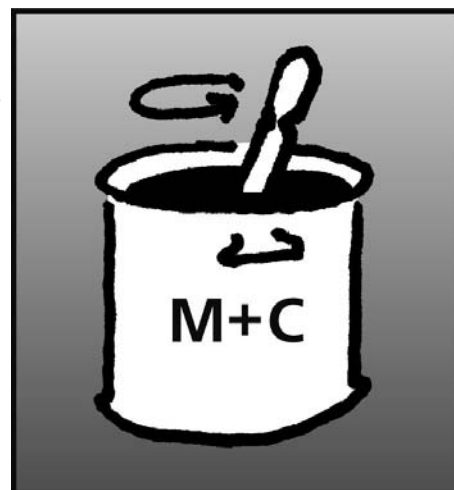
Eliminate unevenness in accordance with the manufacturer's instructions.

Mask off adjoining areas and protect them against contact with KEMPEROL V 210 M.

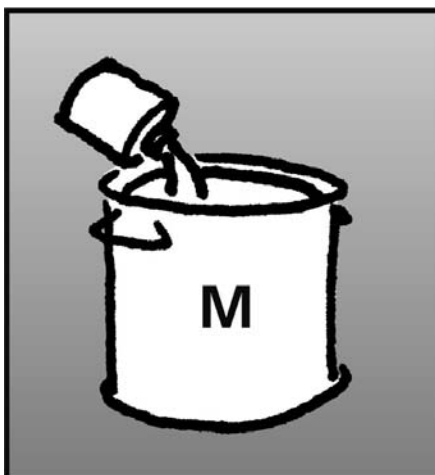


Catalyst powder

KEMPEROL CP catalyst powder (comp. C) to be poured into KEMPEROL V 210 M comp. M.



Mix component M and catalyst powder (component C). Mixing the powder is done with a drill or wooden stirrer.



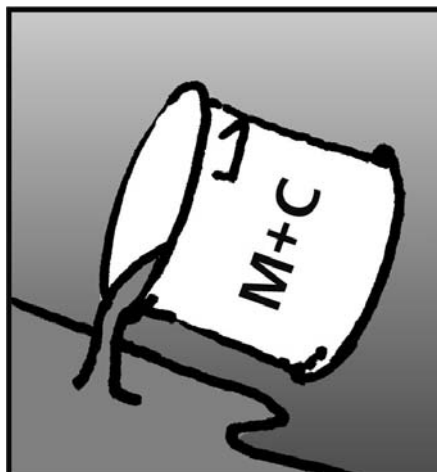
Temperature

Sealing only at substrate temp. above +5°C! Observe the dew point!

KEMPEROL UP-I inhibitor at temperatures $\geq +25^{\circ}\text{C}$, KEMPEROL UP-A cold activator at temperatures $\leq +10^{\circ}\text{C}$ to be poured into comp. M and mix until there are no more streaks by means of a power drill or a stirring stick.

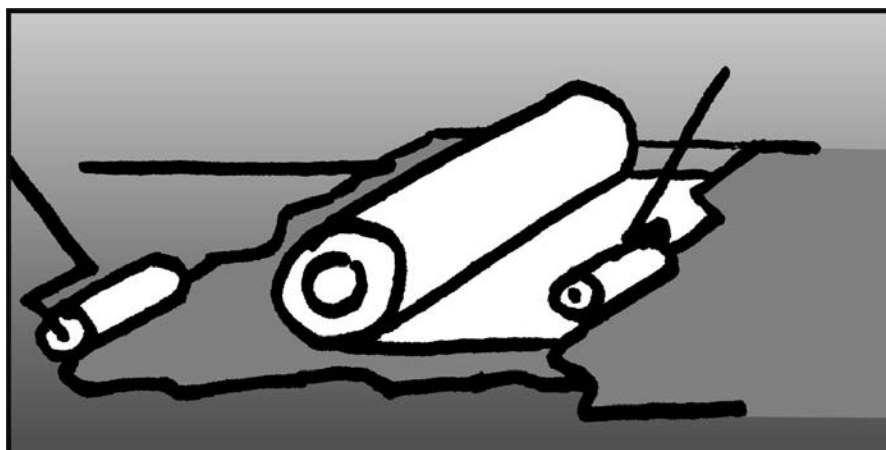
First layer

Apply approx. 2/3 of KEMPEROL V 210 M to the surface and distribute it evenly with a nylon roller.



Fleece

Roll out the KEMPEROL Fleece directly into the liquid first layer of KEMPEROL V 210 M, allowing for 5 cm overlaps.



Second layer

Roll out the KEMPEROL Fleece and embed it with a roller, taking care to remove any air bubbles.

Apply approx. 1/3 of KEMPEROL V 210 M waterproofing to the still wet first coat, ensuring complete saturation of the fleece. Avoid accumulations of material.

Talcum powder

If no further coating is applied, scatter the surface after 12 hours with KEMPEROL TP talcum and sweep it afterwards.



Important:

Wear the personal protective equipment!

When applying KEMPEROL V 210 M explosion protection of the working equipment is necessary.

For the layer thicknesses, the minimum requirements according to ETA must be met. Deviating national requirements shall be taken into account.

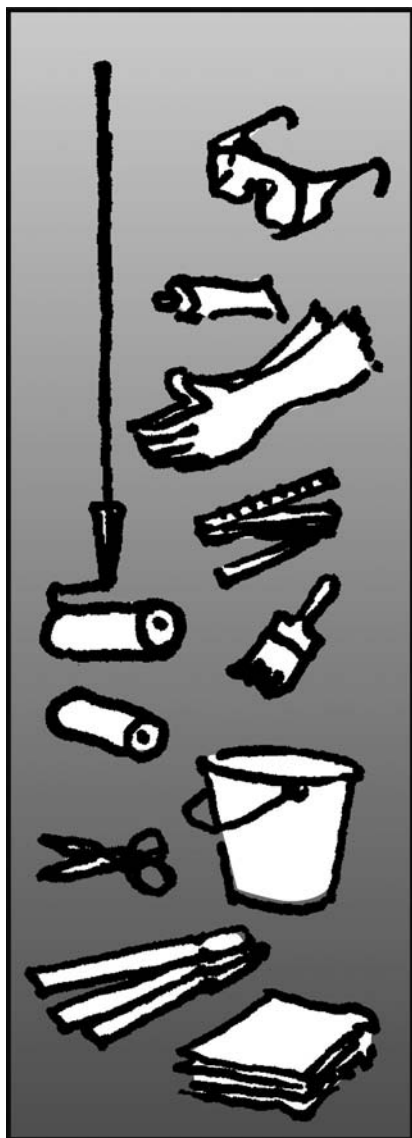
Alkali resistance

The waterproofing provides limited alkaline resistance. Therefore, if a sustained load is expected, apply – after a period of 7 days – KEMPERTEC EP, EP5 or AC as a protection against alkalinity onto the waterproofing

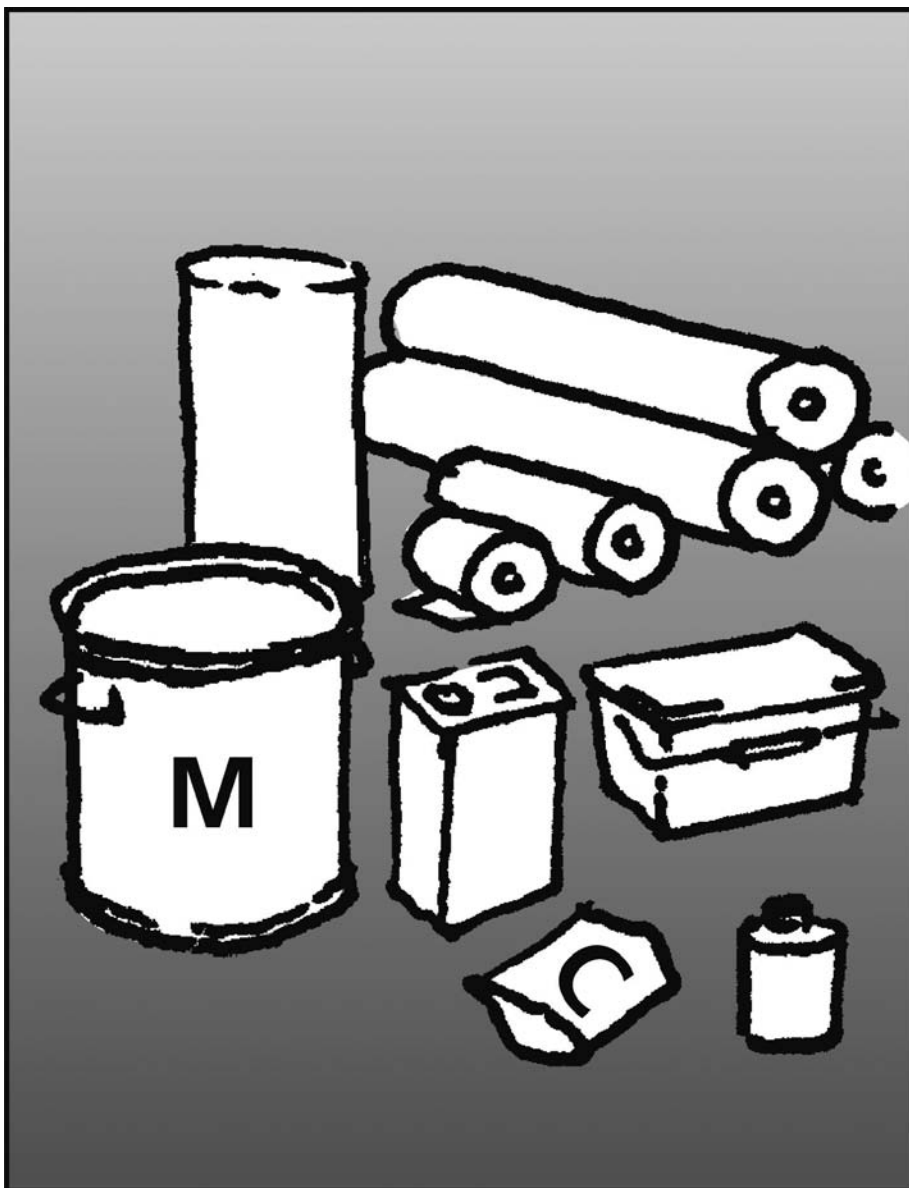
and scatter with KEMCO NQ 0712 Natural Quartz (refer to Technical Information TI 15 - Alkalinity).

Issued: Vellmar, 2021-04-29

Instructions for use KEMPEROL BR M



Goggles, gloves, folding ruler, nylon roller with handle, special brush, scissors, mixing container, stirring sticks, cloth



KEMPEROL BR M Waterproofing (comp. M),
 KEMPEROL CP catalyst powder (comp. C),
 KEMPEROL UP-I inhibitor or KEMPEROL UP-A cold activator,
 KEMPEROL Fleece,
 KEMPERTEC Primer according to the priming recommendation,
 KEMCO MEK Cleaning Agent,

Substrates

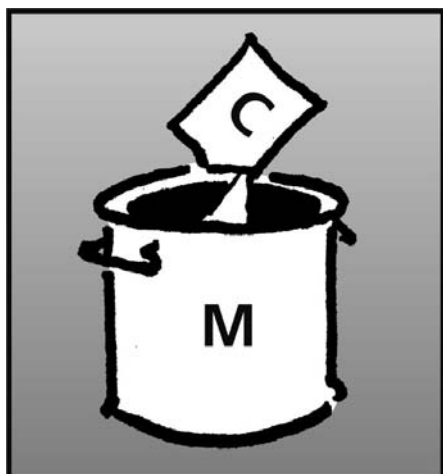
must be level, capable of withstanding loads, dry (residual moisture in the upper 2 cm of concrete < 5%) and free from materials that may hinder adhesion.

Pre-treat the substrate as per the priming recommendations.



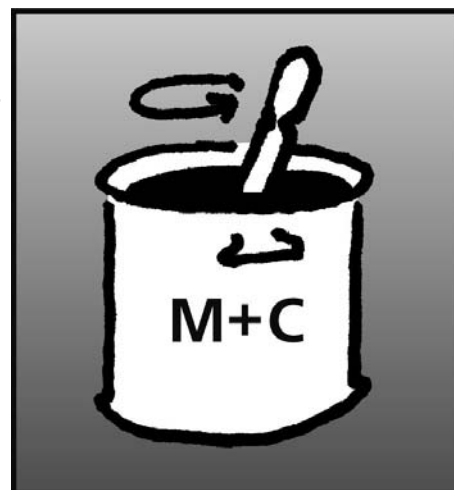
Level out any unevenness according to the manufacturer's instructions.

Mask off adjoining areas and protect them against contact with KEMPEROL BR M.

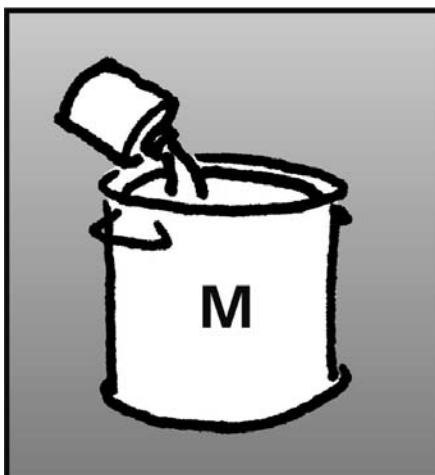


Catalyst Powder

KEMPEROL CP catalyst powder (comp. C) to be poured into KEMPEROL BR M comp. M.



Mix component M and catalyst powder (component C). The powder is mixed by means of a power drill or a stirring stick.



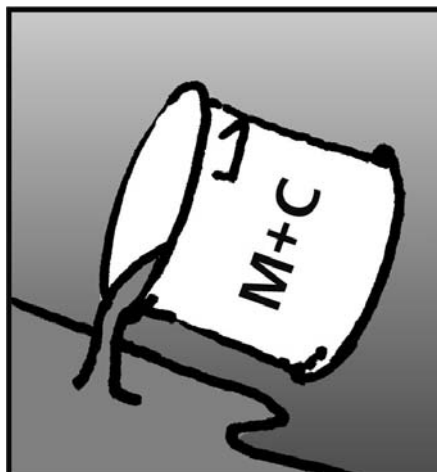
Temperature

Only apply waterproofing at substrate temperatures exceeding +5°C! Please observe the dew point!

KEMPEROL UP-I inhibitor at temperatures $\geq +25^{\circ}\text{C}$, KEMPEROL UP-A cold activator at temperatures $\leq +10^{\circ}\text{C}$ to be poured into comp. M and mix until there are no more streaks by means of a power drill or a stirring stick.

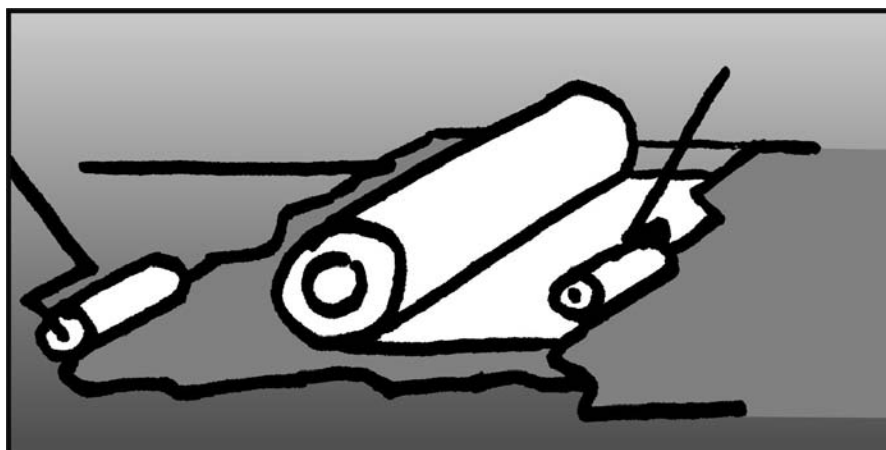
First layer

Apply approx. 2/3 of KEMPEROL BR M to the surface and distribute it evenly with a nylon roller.



Fleece

Roll out the KEMPEROL Fleece directly into the liquid first layer of KEMPEROL BR M, allowing for 5 cm overlaps.



Second layer

Roll out the KEMPEROL Fleece and embed it with a roller, taking care to remove any air bubbles.

Apply approx. 1/3 of KEMPEROL BR M Waterproofing to the still wet first coat, ensuring complete saturation of the fleece. Avoid accumulations of material.

Important: Personal protective equipment must be worn!

When applying KEMPEROL BR M explosion protection of the working equipment is necessary.

In regard to the layer thicknesses, the minimum ETA requirements must be fulfilled. Further national regulations must be observed.

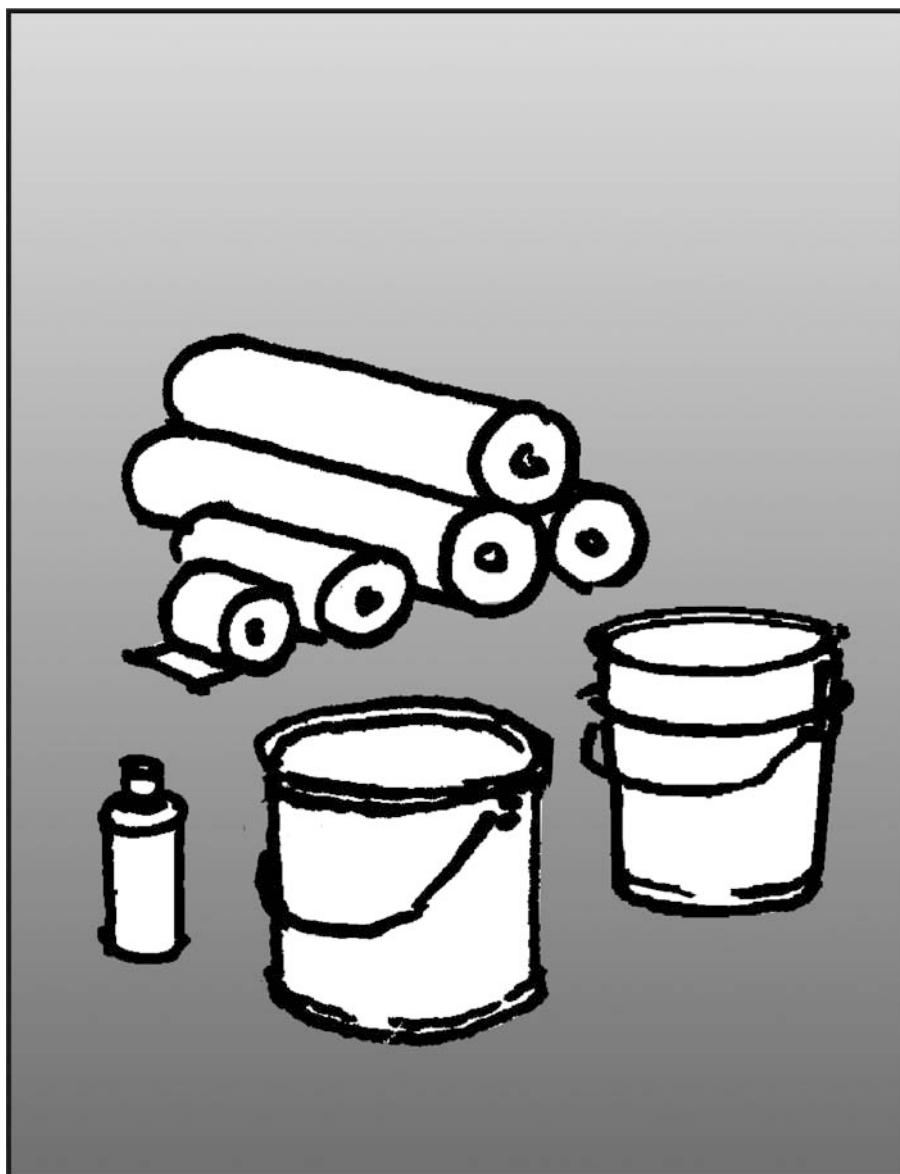
Alkaline protection

The waterproofing provides limited alkaline resistance.

Therefore, if a sustained load is expected, apply – after a period of 7 days – KEMPERTEC EP, EP5- or AC-Primer as a protection against alkalinity onto the waterproofing and scatter with KEMCO NQ 0712 Natural Quartz

(refer to Technical Information TI 15 - Alkalinity).

Instructions for use **KEMPEROL LF**



Goggles, gloves, folding ruler, nylon roller with handle, special brush, cloth, scissors, stirring sticks

KEMPEROL LF,
KEMPERTEC Primer according to the priming recommendation,
KEMPEROL 165 fleece,
KEMCO MEK Cleaning Agent

Substrates

must be level, firm and free from contaminants which may affect adhesion and must be prepared accordingly.

Due to the humidity tolerance of the material KEMPEROL LF can be applied to slightly damp substrates.

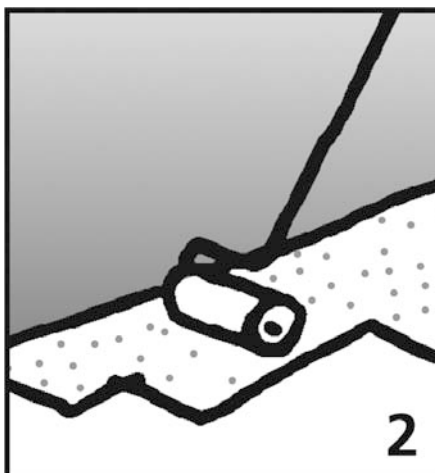


Pre-treat substrates according to the Technical Data Sheet.

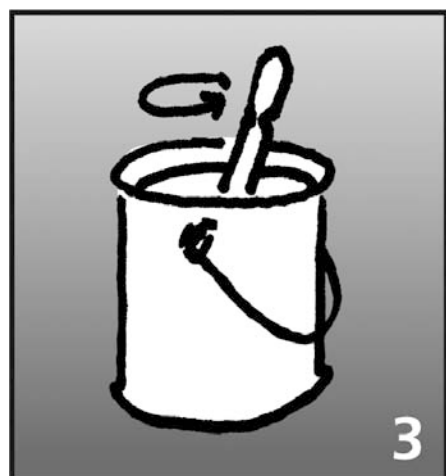
Level out any unevenness according to the manufacturer's instructions. Mask off adjoining areas and protect them against contact with KEMPEROL LF.

Primer

A primer is not required for all substrates. In general, the priming recommendations for KEMPEROL LF must be respected.

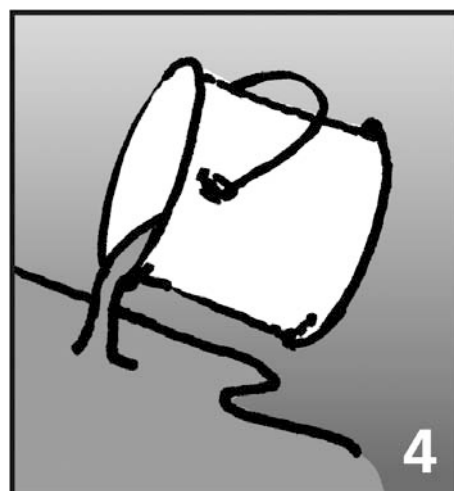


KEMPEROL LF to be stirred with a stirring stick until free from streaks. The result should be a uniform colour (remove any skin that may have formed).



Temperature

Only apply waterproofing at substrate temperatures exceeding +5°C! Please observe the dew point!

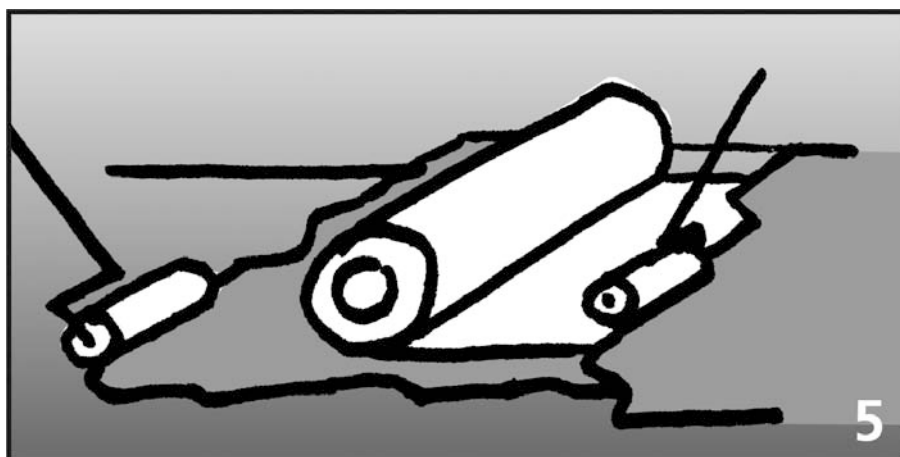


First layer

Apply approx. 2/3 of KEMPEROL LF to the surface and distribute it evenly with a nylon roller.

Fleece

Roll out the product KEMPEROL 165 fleece directly into the liquid first layer of KEMPEROL LF, allowing for 5 cm overlaps.

**Second layer**

KEMPEROL 165 fleece to be rolled in, taking care to remove any air bubbles. Apply approx. 1/3 of KEMPEROL LF to the still wet first coat, ensuring complete saturation of the fleece. Avoid accumulations of material.

Note:

Connections to door and window elements etc. with a height of <15 cm (from upper edge of the coating) should have at least 5 cm of overlap. Connections to the surface sealant and third party products should be made with at least a 10 cm of overlap.

With regard to the layer thicknesses, the minimum ETA requirements must be fulfilled. Further national regulations must be observed.

Important: Personal protective equipment must be worn!

Issued: Vellmar, 2021-04-29

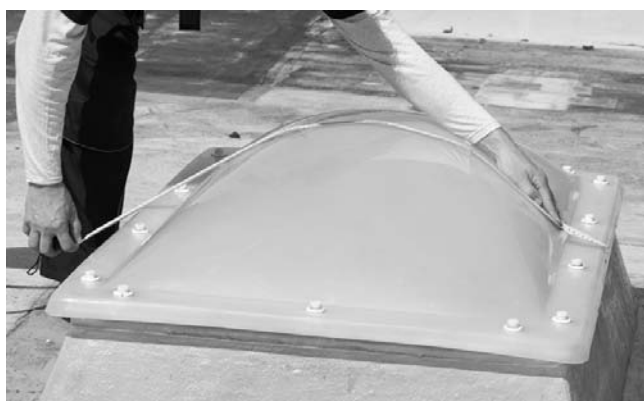
Instructions for use KEMPEROL FALLSTOP



Please note!

Make sure the skylight domes you wish to coat are not damaged (no holes, cracks, etc.) and have been installed professionally on a kerb in strict accordance with the relevant instructions of the respective manufacturer. The substrate must be dry and free from any water which may have penetrated it. The substrate temperature must be at least 3K higher than the dew point temperature. The substrate temperature must be at least +10°C and the relative air humidity < 80%. During application always wear personal protective equipment (goggles, gloves, etc.) incl. fall protection equipment to BGR 198. Please ensure good and constant ventilation at the respective workplace during and after application to guarantee homogeneous curing.

Measuring



The required amount of material must be calculated prior to coating the skylight dome. This involves measuring the entire skylight dome area, incl. the curvature.

Application tools



To apply KEMPEROL FALLSTOP you need digital scales, masking tape, KEMPERTEC foam rollers, a brush, stirring sticks and the KEMPERTEC V4A Measuring Comb.

Calculating the required material



KEMPEROL FALLSTOP must be applied with a material consumption of 1.6 kg/m². The curved shape of the skylight dome means 400 g/m² of material must be applied during each of the four work steps to achieve a homogeneous layer thickness.

Calculation table

Calculation of the skylight dome				Calculation of the total amount of material				Calculation of the amount of material per layer				
m	x	m	=	m ²	x	1.6	=	kg	:	4	=	kg
(length)		(width)				kg/m ²						

A corresponding calculation aid can also be found on the construction site form KEMPEROL FALLSTOP.

Pre-cleaning



Depending on the degree of soiling, old and weathered skylight domes must be cleaned carefully using a mop and water prior to application. Use a scouring sponge to clean soiled frames thoroughly.

Masking



Cleaning



Clean new and pre-cleaned skylight domes thoroughly using a lint-free cloth and KEMPERTEC FALLSTOP Cleaner. Allow the cleaner to evaporate for at least 15 minutes before commencing application. Avoid entrapments of water (e. g. at screw caps or underneath sealing tape) as a result of cleaning.

When applying KEMPERTEC® FALLSTOP to skylight domes with a frame, remember to also fully coat the top surface of the frame. Cover the sides of the frame carefully with masking tape to provide adequate protection. Only remove the masking tape once the material has dried sufficiently to prevent any "runs" or "drips".

Coating



1) Stir the material after opening the container. Subsequently weigh the correct amount of required material for each work step (400 g/m²/step) for the relevant skylight dome.



2) Pour the determined amount gradually onto the skylight dome surface or apply it directly from the container. Use a KEMPERTEC foam roller to apply the material evenly in a criss-cross fashion.

Coating



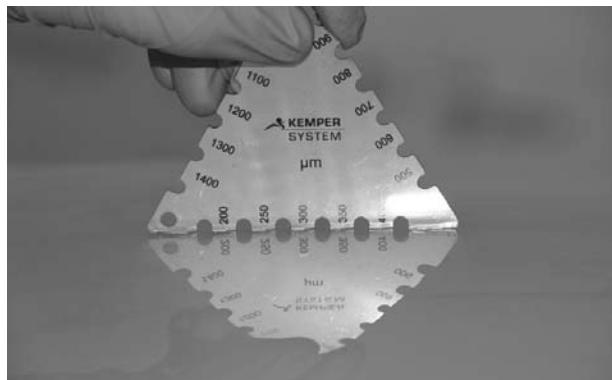
3) Apply the material evenly, both horizontally and vertically, using a foam roller. It is crucial to prevent tiny bubbles and foam forming on the surface.

Due to the shape of skylight domes, go over KEMPEROL FALLSTOP again with a foam roller after initial application, starting at the bottom and working your way upwards, to guarantee an even layer of material and to prevent runs. Depending on the shape of the skylight domes, repeat this procedure again after several minutes to achieve the required layer thickness over the entire surface. Depending on the weather conditions, the material is workable for up to 30 minutes. Stop working the surface as soon as the material starts to "string or stick" to the foam roller. After a curing time of approx. 4 hours KEMPEROL FALLSTOP is rainproof and can be re-coated.

Coating



4) Coat also the upper frame/edge of the skylight dome with KEMPEROL FALLSTOP. Use either a foam roller or a brush for this task. Avoid material build-up by spreading any material that has run down onto the frame/edge evenly.



5) At the end of each work step, check the applied layer thickness at various points using the KEMPERTEC V4A Measuring Comb. This involves placing the right and left "foot" of the measuring comb into the still wet material and using the scale marked on the "teeth" of the comb to measure the layer thickness (400 g correspond to 400 μm).

Repeat three times



After approx. 4 hours the next coat of KEMPEROL FALLSTOP can be applied. Repeat the described coating procedure three times. Always observe work steps 1 to 5. Caution! Affix the KEMPEROL FALLSTOP label to the skylight dome prior to the fourth and last coating.

KEMPEROL FALLSTOP Label



The KEMPEROL FALLSTOP label displays a serial number. It must be completed using a solvent-resistant pen and affixed to the cured third layer of KEMPEROL FALLSTOP. The label is also coated and protected with the product during the fourth and last work step.

Practical tips for application

- Pay attention to all external factors that may have an impact on the surface to stop insects, leaves and other debris becoming embedded in the coating.
- Make sure air-conditioning and ventilation systems in the vicinity of the skylight domes are switched off during and directly after applying KEMPEROL FALLSTOP (refer to Technical Information 23 "Use of solvent-based products").
- Always dry entrapments or films of water that may have formed underneath screw caps or sealing tapes before coating skylight domes (an air blower is ideal for this task).
- Cover skylight dome hinges and opening mechanisms carefully with masking tape to prevent any infiltration of material and to guarantee correct operation.
- When applying KEMPEROL FALLSTOP, a small amount of material should always be pushed along in front of the KEMPERTEC foam roller. The foam roller should work silently when applying the material. Roller noises indicate insufficient material application.
- Place plastic film on top of the open container to help stop a skin forming on the material in the container.
- Cut open and sand down any air bubbles that may form in the cured KEMPEROL FALLSTOP coating, and subsequently reseal with KEMPEROL FALLSTOP.
- In extreme ambient conditions (e. g. heat, wind, etc.), it may be wise to apply the determined amount of material in more than four work steps to achieve the best possible finish.
- Always remove masking tape prior to full curing of KEMPEROL FALLSTOP.
- If a KEMPEROL FALLSTOP surface is to be recoated after more than 7 days, pre-treat the substrate accordingly by gently sanding the surface or applying an adhesive agent. Please contact our Technical Customer Service for more details on + 49 (0)561 8295-0.
- If necessary, a non-destructive before/after ultrasound measurement can be carried out to determine the layer thickness of KEMPEROL FALLSTOP once it has cured fully. The cured layer thickness must be at least 0.9 mm. Please contact our Technical Customer Service for more details on + 49 (0)561 8295-0.

Important notice

- KEMPEROL FALLSTOP needs 7 days to cure fully; only then is the specified **fall-through protection** and **enhanced hail resistance** guaranteed.
- Please refer to our technical data sheets for the listed products.
- KEMPEROL FALLSTOP guarantees fall-through protection for up to 5 years. An object-specific and extended 10-year guarantee is only provided following receipt of a fully completed **KEMPEROL FALLSTOP construction site form**.

Discover more information on our website
www.kemperol-fallstop.de e.g.:

- construction site form available as a download
- the presentation and application video KEMPEROL FALLSTOP
- a list of FAQs about KEMPEROL FALLSTOP

KEMPEROL FALLSTOP...

... tested quality

The efficiency of KEMPEROL FALLSTOP has been recorded in numerous tests.

Please feel free to request our test certificates:

- Testing of fall-through protection to GS Bau 18
- Measuring of the light transmission level
- Testing of fall-through protection to GS Bau 18 in temperatures below zero
- Testing of the hail resistance class
- Testing of accelerated UV ageing with determination of the dynamic and static load carrying capacity and elasticity
- Exposure measurement for indoor and outdoor use
- Testing of fire behaviour to DIN EN 13501-1
- Certificate of melting behaviour to DIN 18230-1:2010-9



Berufsgenossenschaft
Rohstoffe und chemische Industrie

[Gesellschaft für Material- und Bauteilprüfung mbH]

Friedmann & Kirchner



Karlsruher Institut für Technologie

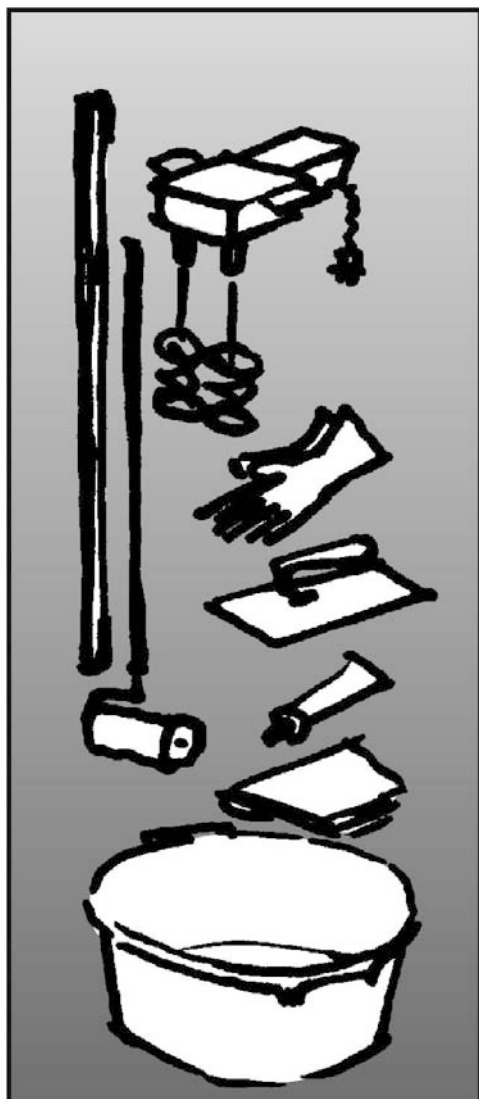
kiwa

Partner for progress

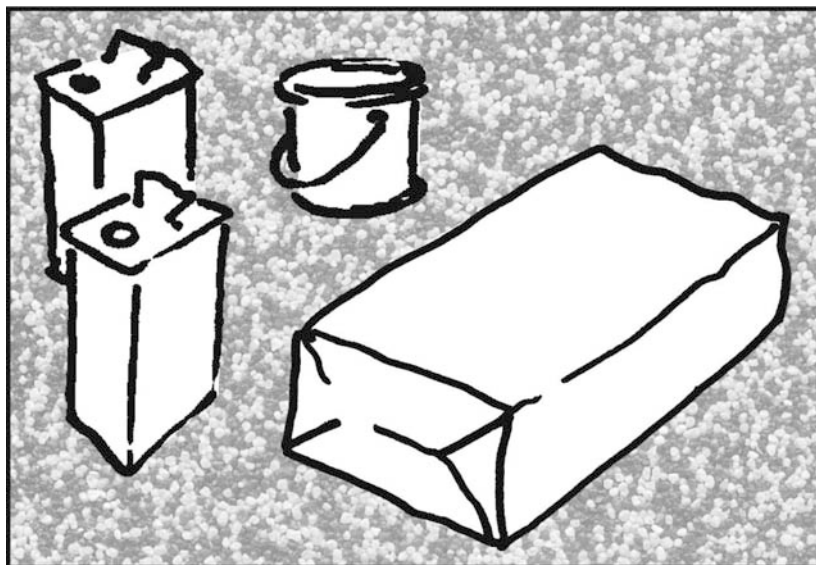
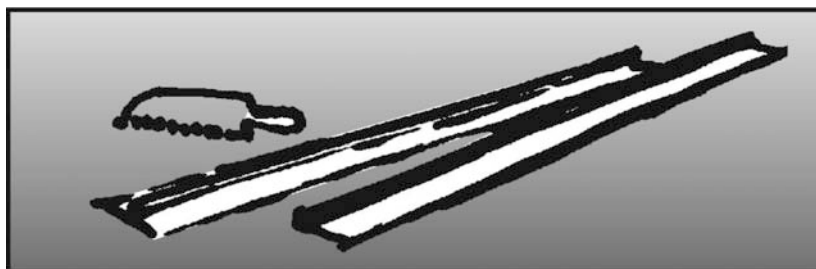


Issued: Vellmar, 2021-04-29

Instructions for use KEMCO Decor Stone / Natural Stones



Straight-edge, nylon roller, positive mixer, smoothing trowel, goggles, gloves, cloths, mortar bucket



KEMCO Decor Stone / Natural Stones consisting of

- KEMCO QB1 Binder and
- KEMCO Decor Stone / Natural Stones

KEMPERTEC Primer,
 KEMCO NQ 0408 Natural Quartz,
 KEMCO MEK Cleaning Agent,
 if necessary expansion joint profile rails 8 mm and
 edge profiles

KEMCO Decor Stone / Natural Stones – the decorative coverings for balconies and terraces

Substrates

Substrates like concrete, screed or KEMPEROL waterproofing products must be level, dry, firm and free of from any substances which may hinder adhesion. Surfaces must be prepared and primed in line with the manufacturer's guidelines.



Mask off adjoining areas and protect them against contact with the KEMPER SYSTEM products.

Substrate

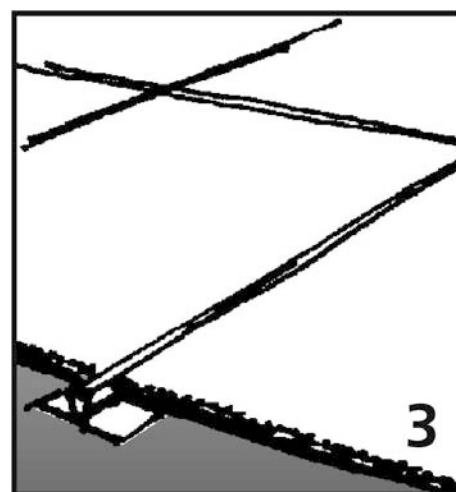
must be pre-treated according to priming recommendation.



bonding coat

The still wet KEMCO POX 2K Primer or KEMPERTEC EP-/EP5 Primer is scattered with approx. 300 g/m² KEMCO NQ 0408 Natural Quartz as a bonding coat.

In die noch frische KEMPERTEC AC Primer werden mind. 2 kg/m² KEMCO NQ 0408 Natural Quartz deckend Korn an Korn als Haftbrücke eingestreut.



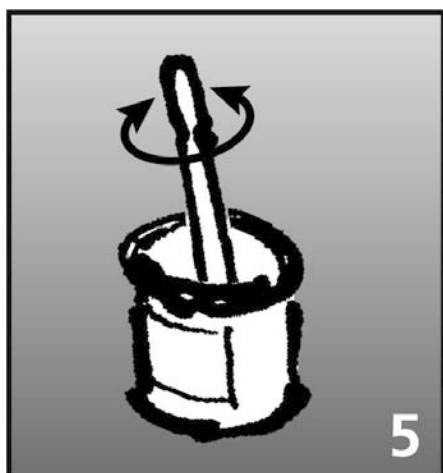
Subdivision in bays

Larger areas must be subdivided in bays according to the tilers' guidelines.

Expansion joint profile rails are used for this subdivision.



KEMCO Decor Stone / Natural Stones to be filled in mortar bucket.



Mixing

After opening the container, stir the binder thoroughly with a stirring stick.



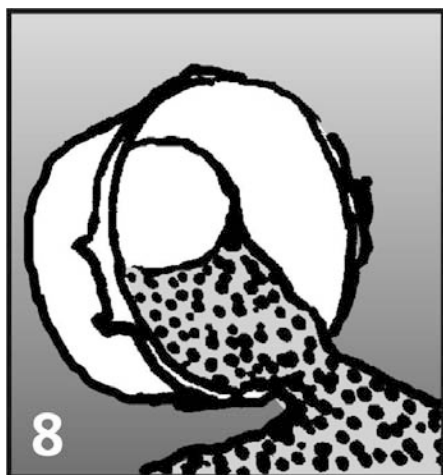
Addition

KEMCO QB1 Binder to be poured in a pre-formed depression of KEMCO Decor Stone / Natural Stones until the container is completely empty.



Mixing

Mix the product KEMCO QB1 Binder with a slowly rotating mixer for 5 minutes thoroughly into the KEMCO Decor Stone / Natural Stones until you achieve a homogeneous mixture with the binder and the stones.



Application

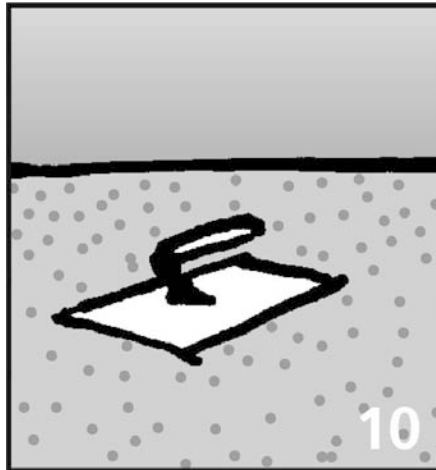
Pour the mixture onto the surface, making sure that the mortar bucket is completely empty.



KEMCO Decor Stone / Natural Stones to be distributed and smoothed with a straight-edge.

Smoothing

KEMCO Decor Stone / Natural Stones to be compacted and smoothed in a last step with a smoothing trowel.



Important:

Personal protective equipment must be worn!

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Technical Information 03 Layer thicknesses according to regulatory requirements and guidelines

Regulatory requirements and guidelines

There are various requirements regarding the layer thickness of waterproofing and surfacing systems. The required layer thickness can vary depending on the applicable guidelines and/or the area of application. Moreover, national and object-specific requirements must be considered. The regulatory requirements regarding the layer thickness are specified by the German Verwaltungsvorschrift Technische Baubestimmungen (VV TB, administrative rule Technical Building Regulations) in connection with the respective performance levels. European Technical Approval (CE mark) indicates the fitness for use of the layer thickness and the respective performance levels. The requirements regarding the layer thickness in the German VV TB are:

For unused roof spaces	slope >2%	1.5 mm
	slope <2%	2.0 mm
For roof spaces with limited use *		2.0 mm

* According to the German VV TB these include balconies, loggias and terraces

The layer thickness and performance level requirements may vary slightly in accordance with the guidelines of various associations, but are never below the legal requirements of the German VV TB e. g. Deutsches Dachdeckerhandwerk (Association of German Roofers): Minimum requirement in accordance with Table 7 for used and unused roof spaces as specified by the waterproofing regulations is 2.1 mm.

Agreements which deviate from common guidelines are always possible under private law.

Layer thicknesses with a system design

When determining the layer thickness, it must be considered that the waterproofing product is a so-called kit which, in addition to the waterproofing materials, also contains further components (e. g. primer, coatings). The description and the resulting overall minimum layer thickness of the kit can be found in the ETAs under "Description of the product".

KEMPERTEC primer usually achieves a layer thickness of approx. 0.3 mm. The layer thickness of the KEMPEROL waterproofing systems is to be determined depending on the consumption; corresponding consumption quantities can be found in the technical data sheets of the waterproofing systems.

Examples of waterproofing systems:

Product / Layer thicknesses	1.8 mm	2.0 mm	2.1 mm
KEMPEROL 1K-PUR waterproofing	at least 3.4 kg/m ²	-	min. 4.0 kg/m ²
KEMPEROL 2K-PUR waterproofing	-	min. 3.0 kg/m ²	min. 3.6 kg/m ²
KEMPEROL V 210 M	at least 2.8 kg/m ²	-	min. 3.6 kg/m ²
KEMPEROL AC Speed	min. 2.5 kg/m ²	min. 2.7 kg/m ²	min. 2.9 kg/m ²

System design examples:

Product / Layer thicknesses	≥ 1.8 mm	≥ 2.0 mm	≥ 2.1 mm
KEMPEROL 1K-PUR waterproofing	-	at least 3.4 kg/m ²	-
KEMPERDUR Deko	-	min. 1.0 kg/m ²	-
KEMPEROL 1K-PUR waterproofing	-	at least 3.4 kg/m ²	-
KEMPERDUR Quartz Surfacing	-	min. 4 kg/m ²	-
KEMPERDUR Deko transparent	-	min. 0.7 kg/m ²	-
KEMPEROL 2K-PUR waterproofing	-	-	min. 3.0 kg/m ²
KEMPERDUR Deko 2K	-	-	min. 1.0 kg/m ²
KEMPEROL 2K-PUR waterproofing	-	-	min. 3.0 kg/m ²

Product / Layer thicknesses	≥ 1.8 mm	≥ 2.0 mm	≥ 2.1 mm
KEMPERDUR HB thick coating	-	-	min. 5.0 kg/m ²
KEMPEROL 2K-PUR waterproofing	-	-	min. 3.0 kg/m ²
KEMPERDUR TC coating incl. scattering	-	-	min. 3.0 kg/m ² (+ min. 4 kg/m ² granules)
KEMPEROL AC Speed	-	-	min. 2.5 kg/m ²
KEMPERDUR AC coating	-	-	min. 4 kg/m ²
KEMPERDUR AC-Finish incl. KEMPERDUR CS Microchips	-	-	min. 0.6 kg/m ²

In this way, KEMPER SYSTEM fulfils the legal requirements for the layer thickness in accordance with the Administrative Regulation on Technical Building Regulations (VV TB) and the generally recognised rules of technology, e.g. DIN sequence 18531-18535, ATV DIN 18336 and rule for waterproofing.

Note: This edition supersedes all previous editions of Technical Information 03.

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Technical Information 10.3 – Water Vapour Permeability and Blistering

Diffusion describes the attempt of materials to counter a concentration difference. A net movement (diffusion) of a substance from areas of higher concentration to areas of lower concentration can be observed, resulting in a partial pressure difference. This applies, in particular, to water in the form of water vapour.

If necessary, KEMPEROL 1K-PUR (μ 2300*) as well as KEMPEROL V 210/BR (μ 11000*) and KEMPEROL 2K-PUR (μ 3100*), as diffusible systems, principally ensure water vapour permeability. These waterproofing systems thus allow wet substrates to dry out.

In addition to the selected waterproofing system, the water vapour diffusion process depends on the system design and atmospheric conditions, such as wind, humidity and temperature.

The following facts must also be considered for these systems. If more water vapour develops than can be actually diffused by the system, blistering may occur. The temperature, in particular, influences the amount of water vapour developed. High temperatures - increased development of water vapour - can cause the "permeability limit" to be exceeded. A typical indication of this is that the blister increases in size as the temperature rises and disappears in the evening or night as the temperature falls. Blistering increases if water vapour can only escape at a few points (e.g. with various substrates, cracks, joints, gaps, material thicknesses, etc.). Depending on the type of load/stress to which the waterproofed surface will be subjected, blisters may limit the desired use.

During the planning phase, i.e. prior to actual construction, tests or inspections must be carried out to determine the current condition of the surface, in particular in terms of its moisture content (opening of the surface, determination of the residual moisture with a CM device or via measurement of the electrical resistance, oven-dry sample to DIN 1048-05). The result of the test can be used to choose suitable measures if necessary. For example, for a roof this could involve the installation of heat insulated roof vents or the flushing and simultaneous aspiration of the heat insulation with preheated air.

Conclusion:

Even with a diffusible system, such as KEMPER SYSTEM waterproofing, excessive water vapour can result in blistering. However, due to the outstanding performance characteristics of KEMPEROL waterproofing, this does not usually affect the efficiency of the product. But it is beyond doubt that, depending on the planned application and load/stress, the blisters can restrict efficiency and a client should always be made aware of this.

*Test temperature 23°C

Note: This edition supersedes all previous editions of Technical Information 10.3

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Technical Information 15- Protection against alkalinity of KEMPEROL and KEMPERDUR products

Without appropriate protection, KEMPER SYSTEM polyurethane- and polyester-based products exhibit inadequate long-term resistance to media with extreme pH values and, therefore must be protected against the damaging effects of alkaline media.

Alkaline reacting materials are encountered on the construction project.

Due to such a high pH value (> 9), there is a long-term risk of damage to the waterproofing or coating if cement products are applied directly on top of KEMPEROL or KEMPERDUR products, e.g. in the form of a sloping screed or ceramic coverings laid in a mortar bed.

Chemically, this type of damage is referred to as saponification. This saponification represents a destruction or splitting of the polymers and leads besides an embrittlement of the KEMPEROL or KEMPERDUR products to a reduction in elasticity.

Adequate protection can only be achieved by applying a protection layer against alkalinity which is flawless and free of gaps on the cured waterproofing or surfacing. On one-component products like KEMPEROL or KEMPERDUR products (e.g. KEMPEROL 1K-PUR waterproofing, KEMPERDUR Deko etc.) the protection layer against alkalinity can be applied after 3 to 7 days; on two-component products (KEMPEROL 2K-PUR waterproofing, KEMPERDUR Deko 2K, KEMPEROL V 210 waterproofing etc.) the protection layer against alkalinity can be applied after one day.

After this period of time the KEMPERTEC EP or EP5 Primer or the KEMPERTEC AC Primer can be applied. This can be carried out in one operation with a thick coating, consumption min. 400 g/m² (KEMPERTEC AC Primer max. 500 g/m²). Caution: On KEMPEROL V 210 M the protection layer against alkalinity may only be produced with the KEMPERTEC AC Primer.

The still wet primer (KEMPERTEC EP or EP5 Primer or alternatively KEMPERTEC AC Primer) is scattered with KEMCO NQ 0712 Natural Quartz (leaving no gaps).

However, to avoid imperfections in the protective layer (on transparent primers), it is better to apply two coats of KEMPERTEC EP or EP5 Primer or alternatively KEMPERTEC AC Primer, consumption for each coat approx. 200 g/m². With KEMPERTEC EP Primer wait for one day, with KEMPERTEC EP5 primer wait for approx. 4 hours and with KEMPERTEC AC Primer wait approx. 1 hour before applying the second coat. Before the second coat is dry, KEMCO NQ 0712 Natural Quartz is spread liberally (leaving no gaps) over the primer.

With KEMPERTEC EP Primer the protective layer must be allowed to cure for at least three days, with KEMPERTEC EP5 primer wait for two days and with KEMPERTEC AC Primer wait for one day at 20 °C before a alkaline-reactive media, e. g. screeds etc. are laid on top. Lower temperatures call for a longer curing time.

Note: This edition supersedes all previous editions of Technical Information 15.

Issued: Vellmar, 2021-04-29

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Technical Information 16

Processing aids for the processing of KEMPEROL waterproofing systems

A. as regards moisture

B. as regards processing temperatures > 5°C

A. as regards moisture

1. KEMPEROL waterproofing systems should form a structural bond with the substrate. Moisture/water can reduce this bond.

2. Moisture can occur as:

- Water on the surface to be waterproofed
- Extremely high air humidity
- Moisture/Water in joints (e.g. heat insulation), expansion joints, grooves, and gaps
- Moisture/water in the area of large cavities and in the case of high surface roughness on mineral substrates
- Condensate or water accumulation on metallic substrates when the temperature falls below the dew point
- Condensate or accumulation of water under deposited containers

As described in the relevant rules and regulations (see rules for waterproofing/flat roof regulations/DIN) as well as in the processing guidelines of KEMPER SYSTEM, waterproofing systems – made of liquid synthetic materials – should ensure full-surface bonding to the substrate. This is achieved with appropriate preparation of the substrate to be waterproofed. These measures include, e.g., the blasting of a concrete surface to be primed or the drying of the substrate. These measures are well known and commonly used. However, less well known, but no less important, are the situations in which bonding is prevented due to condensate forming on the substrate to be treated. Condensation forms when the temperature of the substrate is below that of the dew point.

Dew point

The dew point here is the surface temperature at which the moisture contained in the surrounding air condenses on the surface. This moisture forms a separating film and the full-surface bond is no longer achieved. If the temperature falls below the dew point, work must be stopped.

Basically, there are two possibilities for determining the dew point:

1. Taking measurements:

The dew point can be determined with a measuring device. The values measured can be used to determine the dew point from the table below.

2. Using a table: Measuring the

- a) surface temperature of the area to be waterproofed,
- b) the relative humidity, and,
- c) ambient temperature allows the dew point to be determined from the table.

Table of dew point temperatures

Air temp. (°C)	Dew point temperatures in °C with a relative humidity of										
	45 %	50 %	55 %	60 %	65 %	70 %	75 %	80 %	85 %	90 %	95 %
2	-7,77	-6,56	-5,43	-4,40	-3,16	-2,48	-1,77	-0,98	-0,26	+0,47	+1,20
4	-6,11	-4,88	-3,69	-2,61	-1,79	-0,88	-0,09	+0,78	+1,62	+2,44	+3,20
6	-4,49	-3,07	-2,10	-1,05	-0,08	+0,85	+1,86	+2,72	+3,62	+4,48	+5,38
8	-2,69	-1,61	-0,44	+0,67	+1,80	+2,83	+3,82	+4,77	+5,66	+6,48	+7,32
10	-1,26	+0,02	+1,31	+2,53	+3,74	+4,79	+5,82	+6,79	+7,65	+8,45	+9,31
12	0,35	1,84	3,19	4,46	5,63	6,74	7,75	8,69	9,60	10,48	11,33
14	2,20	3,76	5,10	6,40	7,58	8,67	9,70	10,71	11,64	12,55	13,36
15	3,12	4,65	6,07	7,36	8,52	9,63	10,70	11,69	12,62	13,52	14,42
16	4,07	5,59	6,98	8,29	9,47	10,61	11,68	12,66	13,63	14,58	15,54
17	5,00	6,48	7,92	9,18	10,39	11,48	12,54	13,57	14,50	15,36	16,19
18	5,90	7,43	8,83	10,12	11,33	12,44	13,48	14,56	15,41	16,31	17,25
19	6,80	8,33	9,75	11,09	12,26	13,37	14,49	15,47	16,40	17,37	18,22
20	7,73	9,30	10,72	12,00	13,22	14,40	15,48	16,46	17,44	18,36	19,18
21	8,60	10,22	11,59	12,92	14,21	15,36	16,40	17,44	18,41	19,27	20,19
22	9,54	11,16	12,52	13,89	15,19	16,27	17,41	18,42	19,39	20,28	21,22
23	10,44	12,02	13,47	14,87	16,04	17,29	18,37	19,37	20,37	21,34	22,23
24	11,34	12,93	14,44	15,73	17,06	18,21	19,22	20,33	21,37	22,32	23,18
25	12,20	13,83	15,37	16,69	17,99	19,11	20,24	21,35	22,27	23,30	24,22
26	13,15	14,84	16,26	17,67	18,90	20,09	21,29	22,32	23,32	24,31	25,16
27	14,08	15,68	17,24	18,57	19,83	21,11	22,23	23,31	24,32	25,22	26,10
28	14,96	16,61	18,14	19,38	20,86	22,07	23,18	24,28	25,25	26,20	27,18
29	15,85	17,58	19,04	20,48	21,83	22,97	24,20	25,23	26,21	27,26	28,18
30	16,79	18,44	19,96	21,44	23,71	23,94	25,11	26,10	27,21	28,19	29,09
32	18,62	20,28	21,90	23,26	24,65	25,79	27,08	28,24	29,23	30,16	31,17
34	20,42	22,19	23,77	25,19	26,54	27,85	28,94	30,09	31,19	32,13	33,11
36	22,23	24,08	25,50	27,00	28,41	29,65	30,88	31,97	33,05	34,23	35,06
38	23,97	25,74	27,44	28,87	30,31	31,62	32,78	33,96	35,01	36,05	37,03
40	25,79	27,66	29,22	30,81	32,16	33,48	34,69	35,86	36,98	38,05	39,11
45	30,29	32,17	33,86	35,38	36,85	38,24	39,54	40,74	41,87	42,97	44,03
50	34,76	36,63	38,46	40,09	41,58	42,99	44,33	45,55	46,75	47,90	48,98

For safety reasons, the temperature of the substrate should be 3K above the dew point when carrying out coating and waterproofing tasks.

3. Substrates should always be dry. Damp substrates must always dry prior to the application of KEMPEROL waterproofing systems.

4. If the containers are left outside overnight, water can form or collect on them (e.g. dew, rain). This water must not be allowed to get into the containers when they are opened.

5. If the fleece is stored incorrectly, moisture can develop in the fleece and in or on the processing tools.

Non-observance may result in blistering of the waterproofing which, depending on the level of moisture, can result in foam formation.

Please contact KEMPER SYSTEM if you have any questions or queries regarding the assessment of the processing conditions or the substrate to be processed.

B. Processing temperatures

The optimum processing temperature for KEMPEROL waterproofing products is between 10°C and 25°C. If the temperatures are outside this range, then

1. at low temperatures

- <10°C KEMPEROL 2K-PUR Speedshot for KEMPEROL 2K-PUR waterproofing and KEMPEROL UP-A cold activator for KEMPEROL V 210 M, KEMPERTEC 1K thinner in case of KEMPEROL 1K-PUR waterproofing should be added,
- the material must not be stored open or uncovered on the object overnight,
- the components should be stored in a cool, dry and frost-free place.
- work must be completed early enough to ensure sufficient temperatures for the reaction/curing.
- if dew has formed on the surface to be waterproofed (observe dew point), this can lead to the formation of foam and bubbles.

2. at high temperatures:

- >25°C, to KEMPEROL V 210 M KEMPEROL UP-I inhibitor must be added and mixed in.
- the mixed container can be portioned for parallel processing or smaller containers can be used.
- as there is no product to extend the processing time for the waterproofing materials KEMPEROL 2K-PUR, KEMPEROL 1K-PUR and KEMPEROL AC Speed, the material should not be stored in the sun (cover with light-coloured foil if necessary).

Note: This edition supersedes all previous editions of Technical Information 16.

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Technical Information 21 – Checking – Assessing – Preparing the substrate

General

The most important requirement for the success and long-term adhesion of KEMPER SYSTEM products is the bond with the substrate and its testing, assessment and preparation. Ignoring this requirement is the most common cause of defective workmanship, defects and complaints.

Balconies, terraces and patios can have many different substrates, e. g. old ceramic tiles, mastic asphalt, old paint, concrete or screeds. According to the requirements of DIN 18365 "Flooring works", any substrate that is to be waterproofed must be firm, clean and free from all loose material, dust, dirt, oil and grease.

According to the German Contract Procedures for Building Works (VOB), the contractor must test the substrate to ascertain its suitability for the specified covering. The contractor should inform the client immediately in writing if he has any doubts about the suitability of the substrate for the specified works.

Checking the moisture content of the substrate

In the case of a fresh cement screed or concrete surfaces, a coating is not possible until the residual moisture of the material has dropped below 5%. This is usually not until 28 days after laying the screed or placing the concrete.

In the case of substrates in contact with the soil, they must be adequately isolated against groundwater and rising damp (capillary moisture), e. g. by means of a layer of gravel (filter) plus a damp-proof membrane (dpm). So-called waterproof concrete and waterproofing screeds do not represent adequate protection because they are still permeable to water vapour.

A chilled mirror hygrometer can be used to measure the moisture content. Rising damp can be checked by covering an area of approx. 1 m² with dense polyethylene sheeting. If the covered area turns a dark colour within 24 hours, rising damp is to be expected.

All residual moisture contents of 5% stated in the technical data sheets refer to the measurement with the CM device. Thus, the given values are in mass%.

Checking the strength of the substrate for concrete/screed

In all cases, the substrate must possess adequate strength.

Determine the compressive strength of concrete and bonded screeds with a rebound hammer (Schmidt hammer). They should have a value of min. 30 N/mm². The pull-off strength is determined with an adhesive strength tester. The average value must be 1.5 N/mm², the lowest value 1.0 N/mm². KEMPEROL waterproofing systems are elastic, have a high inherent strength and can bridge over cracks, but as they are very thin (approx. 2 mm), they cannot perform a load-distributing function.

Preparing the substrate

The substrate should be prepared in such a way that a permanent, strong bond is achieved between the system to be applied and the substrate.

To achieve this, the substrate must be consistently firm and free from all separating substances, sharp edges, burrs, flashes, fins, etc.

The choice of a suitable preparatory method depends on the condition of the existing surface, the specification and the waterproofing system to be applied.

Besides the "traditional" methods of treatment

- grinding (grinder)
- cutting (angle grinder, floor saw)
- chiselling (chisel)
- hammering (chisel scaler, needle gun)
- brushing (brush, rotary brushes, brush machine)
- planing (planer)
- sweeping (broom, magnetic broom, sweeping machine)
- blowing off (hot/warm air)
- vacuuming (industrial vacuum cleaner)

...but also the following cleaning and blasting methods...

- water-jet cleaner up to 5 N/cm² (0.5 bar)
- steam cleaners up to 5 N/cm² (0.5 bar)
- High-pressure water-jet cleaners up to 4000 N/cm² (400 bar)
- Wet-blasting equipment with blasting medium recovery
- Wet mist abrasive sandblasting equipment
- Wet abrasive sandblasting equipment
- Dry-blasting equipment with blasting medium recovery
- Free-jet pressure equipment
- Flame cleaning to DVS 0302
- Liquid nitrogen cleaning
- Infrared radiation

are also described in publications (ZTV-SIB / DAfStb).

Cleaning methods using solvents are also still in use, particularly in the case of greasy or atmospheric pollution and/or flexible synthetic sheeting.

Preparing the substrate

1. Flatness of substrate

The flatness of the substrate is based on DIN 18202 "Dimensional tolerances in building construction".

Unevenness and irregularities cannot be compensated for by the KEMPERTEC primer to be applied and therefore require special treatment. High spots must be removed and low spots filled with KEMPER SYSTEM Filling Compound or Repair Mortar.

In this case filling compound is used after applying the primer. The filling compound consists of mixture of

- KEMPERTEC EP Primer and KEMPERTEC KR Quartz Sand Mixture with a mixing ratio of approx. 1 : 4 or
- KEMPERTEC EP5 primer and KEMPERTEC KR Quartz Sand Mixture with a mixing ratio of approx. 1 : 2 or
- KEMPERTEC AC Primer and KEMPERTEC KR Quartz Sand Mixture with a mixing ratio of approx. 1 : 3.

The filling compound is used for unevenness in the range 2–6 mm.

The repair mortar is likewise used after applying the primer. The mortar consists of a mixture of

- KEMPERTEC EP Primer and KEMPERTEC KR Quartz Sand Mixture with a mixing ratio of approx. 1 : 9 or
- KEMPERTEC EP5 primer and KEMPERTEC KR Quartz Sand Mixture with a mixing ratio of approx. 1 : 5 or
- KEMPERTEC AC Primer and KEMPERTEC KR Quartz Sand Mixture with a mixing ratio of approx. 1 : 10.

The repair mortar is used for unevenness in the range 6–20 mm.

Repair mortar can also be used to make good smaller damaged sections or spalling e. g. along edges of joints. Depending on the application and the local conditions, the quartz sand/binder mixing ratio may be varied in order to obtain an optimum result. For further details please refer to the technical data sheets for KEMPERTEC AC Primer, KEMPERTEC EP Primer or KEMPERTEC EP5 primer.

The levelling layer has to be scattered with KEMCO NQ 0408 Natural Quartz.

2. Soiling

KEMPERTEC primers do not adhere well, if at all, to soiled substrates. Therefore, the surfaces must be thoroughly cleaned wet or dry depending on the type of soiling with, for example an industrial vacuum cleaner, high-pressure water jets, KEMCO MEK Cleaning Agent, scouring machines or flame cleaners.

Any bitumen or products containing creosote adhering to the substrate must be removed completely by planing or blast-cleaning.

3. Porous and loose constituents

Cement laitance, cement flakes, mortar residue and all surface constituents, e. g. old paint, that are not permanently attached to the substrate must be removed by chiselling, planing, blast-cleaning or grinding prior to applying the primer and can be levelled as described under point 1 above.

4. Cracks in the substrate

On substrates with a cement binder a network of surface cracks does not have any detrimental effect on KEMPER SYSTEM waterproofing systems; however, greater consumption of primer must be allowed for because the substrate must be fully saturated.

Continuous shrinkage cracks and other cracks resulting from structural movements must be assessed on a case by case basis according to the state of the art and can be filled using appropriate methods.

5. Joints in the substrate

Joints the substrate should be straight, with a consistent width and stable edges.

Any damage can be made good with repair mortar.

6. Voids

In the case of voids, e. g. under old ceramic tile finishes, the tiles must be removed and the void must be made good with a similar material. Repair mortar can also be used to level such unevenness. To achieve flatness / slope of the substrate please refer to the relevant rules and standards.

7. Relevant data sheets and standards:

- DIN 18299 – General technical specifications for building works; general rules for all kinds of building works
- DIN 18336 – General technical specifications for building works; Waterproofing works
- DIN 18352 – General technical specifications for building works; Tile laying works
- DIN 18353 – General technical specifications for building works; Floor screed works
- DIN 18365 – General technical specifications for building works; Flooring works
- DIN 18202 – Dimensional tolerances in building construction – buildings
- DIN 18531-18535 - Waterproofing of buildings (terms)
- Flat roof standards
- Installation of slope according to ZDB
- ZTV-ING
- KEMPER SYSTEM technical data sheets
- KEMPER SYSTEM application instructions

Note: This edition supersedes all previous editions of Technical Information 21.

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Technical Information 22- Processing of KEMPERTEC, KEMPEROL and KEMPERDUR AC products

1. Substrate Check – Definition of adhesion.

For all substrates listed in the priming recommendation for KEMPEROL AC Speed or KEMPERDUR AC coating marked with „Individual test“, a field test can be carried out for testing the adhesion (on plastic-modified screed, impermeable concrete, metals or tiles this is mandatory). The testing is carried out by placing mounds on the substrate.

A

- a small amount of KEMPERTEC AC Primer (approx. 250 g)
- with corresponding quantity KEMPEROL CP catalyst powder (approx. 1 teaspoon from a bag of 20 g)
- approx. 30 weight % at KEMCO NQ 0712 Natural Quartz (alternatively KEMPERTEC KR Quartz Sand Mixture)

This mixture must be applied as a mound on the prepared substrate to be tested. On different or inhomogeneous substrates several mounds must be applied.

After hardening of the seal - about 30 minutes after adding the KEMPEROL CP catalyst powder - it can be knocked off with a hammer.

The following break patterns may occur:

- A break in the substrate (cohesive failure) → good adhesion
- A break in the mound (cohesive failure) → good adhesion
- A break between the mound and the substrate (adhesive failure) → no adhesion
- A failure in the curing process → no adhesion

A better adhesion can be achieved when the substrate has been suitably prepared (refer to Technical Information TI 21: Substrate Assessment). After preparation of the surface, the test must be repeated.

If failures in the curing process still consist the system cannot be applied.

2. Compatibility of the KEMPEROL AC products with KEMPERTEC primers

Due to the raw material basis of the KEMPEROL AC products (methyl methacrylate), there is no compatibility with the KEMPERTEC primers:

- KEMPERTEC R Primer,
- KEMPERTEC EP-/EP5 Primer,

there is not. It can lead to a dissolution or softening of the KEMPERTEC primers and subsequent hardening problems of the KEMPEROL AC products.

In general, only KEMPERTEC AC Primer should be used underneath KEMPEROL AC products.

3. Processing of KEMPEROL / KEMPERDUR AC products in indoor areas

If KEMPEROL / KEMPERDUR AC products are used in indoor areas or poorly ventilated outdoor areas, the following points should be noted:

- Ensure sufficient ventilation; if necessary, use additional
- technical equipment to guarantee a sufficient exchange of air
- Always wear personal protective equipment (PPE).
- Monitor the occupational exposure limits in the working area and adjacent rooms.
- Ensure working area preparation prevents unpleasant smells or solvent vapours entering adjacent rooms.
- Always use explosion-proof equipment to apply products.
- Requirements of the German Employers' Liability Insurance Association (GISBAU) should be respected.

Insufficient or poor ventilation may result in methyl methacrylate-based products failing to cure correctly in surface areas. The surface is likely to remain permanently soft and cause long-term odour-related problems.

If methyl methacrylate-based products are to be applied in public buildings, we recommend carrying out the relevant work after seeking approval from the relevant building control body (submission of safety data sheets, user instructions, etc.) and during closing hours.

Please also observe the publication of the Committee of German Federal States for Occupational Health and Safety (LASI) LV 19, "Coating industrial floors and other large indoor areas with methyl methacrylate" as well as the progress report of the Deutsche Bauchemie e.V. "Methacrylic resins in the construction industry and the environment".

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Technical Information 23 – Use of products containing solvents

If porous or absorbent substrates (concrete < C12/15 (B15), concrete with lightweight aggregates, cellular concrete blocks, sand-lime bricks, aerated concrete, clay bricks, wood etc.) adjacent to occupied interior spaces are to be treated with a KEMPERDUR surfacing system, please note the following points:

- Do not use solvent-based KEMPEROL, KEMPERDUR or KEMPERTEC products directly on porous or absorbent substrates! (solvent odours in indoor areas possible)
- Check the possibility of using solvent-free products.
- Generally, make good all open joints, gaps, etc. or large areas of damage before beginning work.
- If, nevertheless, products containing solvents are to be used, prime the entire substrate with two coats of solvent-free KEMPERTEC EP or EP5 Primer to close all the pores. Work a layer of fine sand into the second coat!
- Solvent-based KEMPEROL, KEMPERDUR or KEMPERTEC products must be only applied with the layer thickness as it is described in the technical data sheet.
- Solvent-based KEMPEROL, KEMPERDUR or KEMPERTEC products may only be used indoors or near air intakes of air conditioning /ventilation systems, windows, doors etc. if all safety measures (turning off of the air conditioning system, use of supply and exhaust air unit etc.) are observed!
- Provide occupants and users with all necessary information about the work well in advance.

Solvent-based KEMPEROL, KEMPERDUR or KEMPERTEC products are:

- KEMCO 1K Primer
- KEMPERTEC FPO Primer
- KEMPEROL 1K-PUR waterproofing
- KEMPEROL BR M Waterproofing
- KEMPEROL V 210 M waterproofing
- KEMPEROL FALLSTOP
- KEMPERDUR Deko
- KEMPERDUR Deko transparent
- KEMPERDUR Finish matt
- KEMPERDUR Finish glossy
- KEMCO MEK Cleaning Agent

Note: This edition supersedes all previous editions of Technical Information 23.

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Technical Information 24 - Cleaning and maintenance of KEMPEROL waterproofing systems and KEMPERDUR surfacings

Please observe the following instructions for the cleaning and care of surfacings and waterproofings by KEMPER SYSTEM:

- The KEMPEROL waterproofing systems and surfacings can be cleaned with conventional floor cleaning or care products. In all cases, follow the instructions of the manufacturer exactly regarding the use and dosing of such products.
- The surface is cleaned using an all-purpose cleaner (neutral or alcohol-based cleaners) which are diluted in water. After cleaning, all treated surface must be rinsed with clean water to remove deposits of dissolved contaminations. Do not use acidic or solvent based cleaning agents or e.g. abrasive cleaners.
- Highly concentrated cleaning agents and disinfectants as well as caustic sanitary cleaners are unsuitable, because they can lead to dissolution of the KEMPEROL or KEMPERDUR surfaces.
- Some window cleaning agents contain solvents which can attack the surfacing or cause discoloration. Therefore avoid excessive splashing when cleaning windows with such products and always remove all traces of such cleaning agents from the waterproofing or surfacing.
- Do not clean the surface mechanically (e. g. with a metal brush, scraper).
- High-pressure cleaners or mechanical cleaning machines should only be used occasionally and the maximum pressure must not exceed 80 bar for KEMPEROL waterproofing systems and 40 bar for KEMPERDUR surfacings, as otherwise spalling may occur (furthermore, a distance of at least 20 cm between the nozzle and the substrate must be maintained).
- Reposition plant tubs etc. at regular intervals in order to prevent marking and discolouring the surface underneath.
- Special products for removing algae may be used as required to clean any surfaces affected by algae growth (e.g. Hotrega Grünbelagsentferner, Technolit Grünbelagsentferner Konzentrat, etc.) .

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Technical Information 30 – Processing of KEMPEROL 2K-PUR waterproofing in vertical surfaces

When using KEMPEROL in vertical of containers, tanks, manholes or water collection tanks, etc., care must be taken to always give preference to solvent-free systems. In the case of KEMPER SYSTEM products this corresponds to the KEMPERTEC EP /EP5-primer and the KEMPEROL 2K-PUR waterproofing.

However, care must be taken to ensure adequate ventilation. The respective H- and P-phrases should be observed.

When planning waterproofing, it is necessary to distinguish whether the container is always filled with water or not. If the container is sometimes empty, make sure that water under external hydrostatic pressure cannot reach the inner surface of the waterproofing, as there is otherwise a risk of bubble formation in the liquid-applied waterproofing. There is no risk of this if the container is always filled with water (internal pressure).

Cement-based substrates, such as concrete, of adequate grade can be used as substrates. Substrate prerequisites and preparation are described in detail in Technical Information 21 which must be respected.

From the workflow, first the KEMPERTEC EP / EP5 primer, incl. a quartz sand spreading must be applied. It should be noted that the primer must be applied to the vertical surface up to the pore closure and capillary closure. Depending on the substrate, several priming processes may be necessary. The inserted quartz sand should look out so far from the primer that a uniform rough and non-slip surface is created. The consumption of primer should not fall below the value of 300g/m².

Deeper cavities, voids or shrinkage holes can be filled or levelled out with a filling compound during the priming stage.

The exact mixing ratios are specified in the technical data sheet of the respective primer.

Recoatbility depends on the applied primer, KEMPERTEC EP Primer min. 16 h and KEMPERTEC EP5 primer min. 4 h.

With the sealing work, first of all the details such as inlets and outlets, corners and edges must be sealed. Also transition areas from the floor surfaced to wall surfaces and inside and outside corners must be executed before the surface sealing. For this purpose, the KEMPEROL 165 fleece must be used in a width of at least 20 cm.

Various fleece solutions are possible for surface waterproofing. It basically depends on the shape and height of the container.

With up to 2 m high containers, it is advisable to install the fleece from top to bottom. It is advantageous if the fleece is cut ready for use in advance and rolled up carefully.

Conversely, the fleece should be applied from bottom to top in containers above 2 m. However, the fleece should still be cut to a maximum length of 2m ready for use in advance. It is of course also possible to leave the fleece on the original roll if an adequate guide is used. This guide could consist of two pieces of wood of the same height as the container being waterproofed into which nails are inserted at 10 to 15 cm intervals in a sawtooth pattern. Then you can use a broom handle (or similar tool) to hook the fleece roll to the nails at the corresponding height.

When waterproofing, irrespective of the fleece solution, it is essential to apply a first coat and second coat of liquid-applied waterproofing to the fleece. The fleece must be sufficiently saturated with the waterproofing agent and any air bubbles completely removed. Special attention should be paid to fleece overlapping and fleece cross joints. The risk here lies in the formation of water-bearing channels due to incorrectly installed fleece.

The viscosity of our KEMPEROL 2K-PUR waterproofing is set in the factory so that vertical surfaces in joining areas can be easily sealed. If vertical surfaces have to extend past the terminal areas, e.g. complete wall surfaces to be sealed with KEMPEROL 2K-PUR the addition of KEMCO TX Thixotropic Additive is recommended. The addition of KEMCO TX Thixotropic Additive increases the viscosity of KEMPEROL 2K-PUR. The run down of the sealing compound is thereby limited, or the application of the material pre-layer is much easier. Also recommended is the use of KEMPEROL 165 fleece in smaller widths of 52.5cm resp. 70cm. The use of 105cm fleece is possible, but requires a lot of experience in handling and manoeuvring of KEMPEROL seals and corresponding staffing resources.. For one person alone, the processing of KEMPEROL 165 fleece in 105cm width on wall surfaces presents a problem.

Another relief is, only the material pre-layer of KEMPEROL 2K-PUR too thixotropic, but not the material after-layer, since the distribution of the added mass is made difficult due to the higher viscosity. The application of the material after-coating is easier without the addition of KEMCO TX Thixotropic Additive easier.

Dosing and processing:

The ideal quantity of KEMCO TX Thixotropic Additive to be added to KEMPEROL 2K-PUR waterproofing is between 1.0-1.25 mass%. In short, when using a 12.5 kg pack of waterproofing, add a 150 g bag of thixotropic agent (each cardboard box contains four bags, each weighing 150 g). For smaller containers, e.g. 5 kg pack (2 x 2.5 kg in a sachet) or, if not the whole package is used, the quantities must be calculated and weighed accordingly. Always consider the time required for mixing. As a matter of principle, a mechanical mixing variant should be provided (slow-running mixing device with a paint mixing blade or helical mixing blade). It is not possible to obtain a smooth and homogeneous waterproofing mixture when mixing by hand (stirring stick). For 12.5 kg containers the mixing time is approx. 5 to 8 minutes, therefore the KEMCO TX Thixotropic Additive should always be mixed in before the hardener (component B) is added to the basic component A of KEMPEROL 2K-PUR.

The addition of KEMCO TX Thixotropic Additive as described above has no impact on the product's characteristics, apart from the fact that KEMPEROL 2K-PUR becomes more viscous (refer to technical data sheet KEMPEROL 2K-PUR sealing).

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Technical Information 33– processing of KEMPEROL AC Speed / AC Speed+ sealings at temperatures below +5°C

KEMPEROL AC Speed can also be produced in adverse weather conditions with regard to the temperatures. KEMPEROL AC Speed becomes hardened even at temperatures **down to -5°C** with addition of 4% KEMPEROL CP catalyst powder with no problem. As a restriction, it must always be considered that the background temperature must be by 3°C or 3K above the dew point.

When application is carried out at temperatures below the freezing point up to max. -5 °C, the substrate should be free from ice, frost, snow and freezing rain.

Further requirements placed on the substrate ("Moisture") are described in detail in Technical Information 21 "Testing-Assessing-Preparing the Substrate" (TI21).

Please note that low temperatures may have an impact on the product characteristics, e.g. pot life, application time, resistance to rain and curing. As a general rule, the colder the weather, the longer the chemical process takes.

However, this has no negative impact on the technical parameters of the KEMPEROL AC Speed in terms of functionality.

The specifications above apply also to KEMPERTEC AC Primer.

Note: This edition supersedes all previous editions of Technical Information 33.

Issued: Vellmar, 2021-04-29

Our technical data sheets / technical information and application instructions reflect the current level of knowledge in our company and the experience with our products. In each case, the new edition supersedes the previous technical information and renders it invalid. It is therefore necessary that you always have to hand the current code of practise. The latest version can be retrieved from the KEMPER SYSTEM Login section. When using our products, a detailed, object-related and qualified inspection is required in each individual case in order to determine whether the product and /or application technology in question meets the specific requirements and purposes. We are liable only for our products being free from faults, and this only if our relevant product has been used and applied according to the instructions in our technical data sheets. Correct application of our products therefore falls entirely within the scope of liability and responsibility of the user (contractor). Our products are sold exclusively on the bases of our conditions of sale and delivery.

For all technical data sheets, the original German version of this document shall prevail exclusively. No liability is assumed for translation errors.

Technical Information 34 - Correct masking of the surface to be treated with KEMPEROL

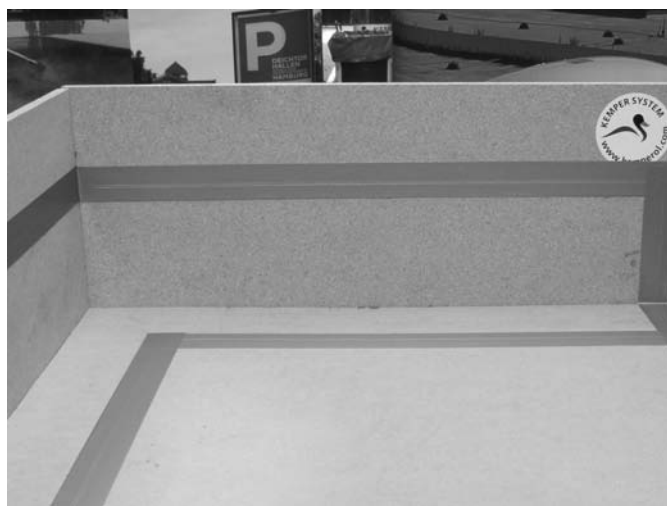
Masking of the area to be treated

In order to obtain a clean edge, it is essential to mark the areas to be waterproofed and tape the sealing boundaries with fabric tape (duct tape) before applying the KEMPEROL products. When using duct tape check if highly adhesive tape can be removed without damaging the substrate.

Step 1: Measuring and marking



Step 2: Masking the marked area with duct tape



Press the duct tape against the substrate and smooth it with your hand to avoid creases and material seeping underneath the tape.

Step 3: Application of KEMPERTEC primer (if necessary)

Refer to respective technical data sheet for the application of KEMPERTEC primer.

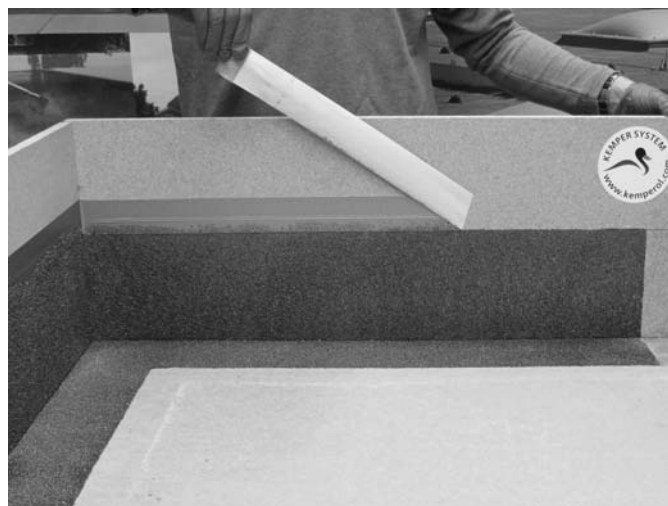
The application guidelines must be strictly adhered to.



Step 4: Removing the duct tape

The duct tape must be removed immediately after application of the primer to avoid damaging the KEMPERTEC primer.

Please note that the duct tape must be pulled upwards from the still wet KEMPERTEC primer.





Before waterproofing work with KEMPEROL Waterproofing, new duct tape has to be applied. Use new duct tape and place it approx. 1-2 mm above the KEMPERTEC primer.

Here, too, the duct tape must be removed before the KEMPEROL waterproofing has cured.

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General information

Changes to the colour caused by weather conditions and/or UV rays do not influence the technical parameters. The times given above are reduced with higher and increased with lower ambient and substrate temperatures. KEMPER SYSTEM products must not be mixed with other manufacturers' products.

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Working time - pot life:

The pot life of a reactive material denotes the length of time for which the product remains usable. It is also occasionally referred to as "usable life". It is the time between beginning to mix a multi-component product (or from the moment of opening the container in the case of a single-component product) and the end of its usability, in other words the length of time during which the substance can still be "taken out of the pot". The end of the pot life is usually indicated by a noticeable rise in the viscosity (increase in stickiness), which prevents further proper use of the product. Pot life and working time are generally not the same thing for our products! The reason for this is that the pot life is determined by means of a viscometer upon reaching a defined viscosity, but this is greater than the working time relevant in practice. Quite obviously, a change in the viscosity has a considerable influence on the penetration and saturation behaviour (with respect to the substrate or fleece). At the end of the pot life the viscosity of a product is so high that it is no longer possible to use it properly or to achieve an adequate bond with the substrate. Therefore, our working times are approx. 3–5 minutes shorter than the pot lives as measured. As a rule of thumb, a product whose viscosity is clearly greater than that of liquid honey (~ 10000 mPas) should no longer be used. This specifies the minimum length of time before a subsequent coat or wearing course can be applied. This length of time is determined by an adequate strength or degree of curing being achieved but also by the release (evaporation) of any solvents present in the product. Depending on the weather conditions, any additional covering should be applied within 14 days.

Here, the period of time is given after which a subsequent protective layer / wearing course can be applied at the earliest. This period is determined on the one hand by the time needed until a sufficient strength or curing is reached and on the other hand by the outgassing (evaporation) of solvents which may be necessary. Depending on weather conditions, the subsequent layers should be applied within 14 days.

Sanding:

It is generally recommended to scatter two-component primers with an appropriate product. For all epoxy resin-based products scattering the surface with the appropriate product is imperative (KEMPERTEC EP Primer / KEMPERTEC EP5 primer). By scattering natural quartz (at least 2.0 kg / m²) onto the primer, a surface with the appropriate roughness is achieved ensuring an optimum adhesive bond with the next layer. This also serves as a protection of the primer against UV radiation, especially if longer work interruptions (longer than 2 weeks) are necessary.

Products:

KEMPERTEC primers are designed to provide ageing resistance, but as a rule they do not offer UV resistance. KEMPEROL waterproofing products are designed to provide ageing resistance or UV resistance and our decorative KEMPERDUR products are designed to provide UV resistance and colour fastness.

UV radiation resistance:

The ageing resistance with respect to light (UV radiation) in accordance with ETAG 005 has been verified for our waterproofing products.

Colour fastness:

The durability and constancy of the colour when exposed to (UV) light and environmental influences ("non-fading").

Yellowing:

As no non-fading raw materials are used in our waterproofing products, “yellowing” is possible depending on the degree of weathering and the effects of UV radiation, but this does not impair the function of the waterproofing.

Performance categories for liquid applied roof waterproofing systems according to ETAG 005

Performance categories

Classes	Abbreviation	Performance categories
Climatic zone	M	moderate climate
	S	severe climate
Expected working life*	W1	5 years
	W2	10 years
	W3	25 years
Load capacities	P1	low load
	P2	moderate load
	P3	normal load
	P4	special load
Roof slope	S1	<5%
	S2	5 to 10%
	S3	10 to 30%
	S4	>30%
Minimum surface temperatures	TL1	+5°C
	TL2	-10°C
	TL3	-20°C
	TL4	-30#
Maximum surface temperatures	TH1	+30°C
	TH2	+60°C
	TH3	+80°C
	TH4	+90°C

* The working life category is an estimation of the working life based on the results of the durability tests according to ETAG 005. For the working life category W3, the continued satisfactory performance must be demonstrated by the previous use for a minimum period of 5 years.

Overview - Performance categories of KEMPEROL waterproofing systems

KEMPEROL water-proofing systems	Performance categories							
	W2	W3	P3	P4	TL3	TL4	TH3	TH4
KEMPEROL V 210 M / BR M	X	X	X	X	X	X	X	X
	X	X	X	X	X	X	X	X
	X	X	X	X	X	X	X	X
KEMPEROL 1K-SF	X	X	X	X	X	X	X	X
	X	X	X	X	X	X	X	X
KEMPEROL PU Aqua	X	-	X	X	X	-	X	X

Overview of chemical resistance of

unsaturated polyesters (UP)

- KEMPEROL V 210 M
- KEMPEROL BR M

one-component polyurethanes (1K-PU)

- KEMCO 1K Primer
- KEMPERTEC R Primer
- KEMPEROL 1K-PUR waterproofing
- KEMPERDUR Deko
- KEMPERDUR Finish glossy
- KEMPERDUR Finish matt
- KEMCO QB1 Binder

two-component polyurethanes (2K-PU)

- KEMPEROL 2K-PUR waterproofing
- KEMPERDUR Deko 2K
- KEMPERDUR HB thick coating
- KEMPERDUR TC coating

polymethyl methacrylates (PMMA)

- KEMPERTEC AC Primer
- KEMPEROL AC Speed
- KEMPEROL AC Speed+ Sealing
- KEMPERDUR AC coating
- KEMPERDUR AC Park
- KEMPERDUR AC-Finish

epoxy resins (EP)

- KEMPERTEC EP Primer / EP5 Primer
- KEMCO POX 2K Primer
- KEMPERDUR EP-Finish

As of: Vellmar, 2021-04-26

Media	solid	solution	liquid	UP	1K-PU	2K-PU	PMMA	EP
acetone			X	—	—	—	—	—
battery acid		X		0	0	0	+	+
aluminium chloride solution 30%		X		+	+	+	+	+
formic acid <30%		X		0	0	0	0	0
formic acid 31-85%		X		—	—	—	—	—
ammonia solution <10%		X		—	—	—	+	+
ammonium chloride	X	X		+	+	+	+	+
Ammonium carbonate	X	X		+	+	+	+	+
ammonium perchlorate	X	X		0	0	0	+	+
ammonium phosphate	X	X		+	+	+	+	+
Ammonium sulphate	X	X		+	+	+	+	+
barium chloride	X	X		+	+	+	+	+
barium hydroxide	X			0	0	0	+	+
barium hydroxide solution		X		—	—	—	+	+
barium nitrate	X	X		+	+	+	+	+
petrol			X	0	0	0	0	+
succinic acid	X	X		+	+	+	+	+
beer			X	+	+	+	+	+
lead acetate	X	X		+	+	+	+	+
bleaching lye			X	—	—	—	—	0
borax	X	X		+	+	+	+	+
boric acid		X		+	+	+	+	+
hydrobromic acid		X		0	0	0	+	0
butanal			X	—	—	—	—	—
butanol			X	0	0	0	+	+
butyric acid			X	—	—	—	+	0
butyric acetate			X	—	—	—	—	+
calcium chloride	X	X		+	+	+	+	+
calcium formate	X	X		+	+	+	+	+
calcium hydroxide	X			+	+	+	+	+
calcium hydroxide solution		X		—	—	—	+	+
calcium hydroxide moist		X		—	—	—	+	+
calcium nitrate	X	X		+	+	+	+	+
chlorine bleaching			X	0	0	0	0	0
monochloroacetic acid	X	X		—	—	—	—	—
chlorinated lime	X			0	0	0	0	0
chloroform			X	—	—	—	—	+
chlorine water		X		0	0	0	0	0
chlorine water (swimming pool)		X		+	+	+	+	+
chromic acid 10%		X		—	—	—	—	—
cobalt chloride	X	X		+	+	+	+	+
cobalt nitrate	X	X		+	+	+	+	+
potassium cyanide	X	X		+	+	+	+	+
cyclohexanol			X	0	0	0	+	+
cyclohexanone			X	0	0	0	—	0
dibutyl phthalate	X			0	0	0	0	+
dioctylphthalate	X			0	0	0	0	+
fertilisers	X	X		0	0	0	0	0
iron(III) chloride solution 50%		X		+	+	+	+	+
iron chloride	X	X		+	+	+	+	+
ferrous sulphate	X	X		+	+	+	+	+

Media	solid	solution	liquid	UP	1K-PU	2K-PU	PMMA	EP
ferrous sulphate moist		x		+	+	+	+	+
acetic acid <10%		x		0	0	0	+	+
acetic acid conc.			x	-	-	-	-	-
ethanol <50%			x	0	0	0	+	0
ethanol conc.			x	-	-	-	+	0
ether			x	0	0	-	-	-
ethyl acetate			x	-	-	-	-	0
ethylglycol acetate			x	-	-	-	-	0
hydrofluoric acid 10-14%			x	-	-	-	-	-
formaldehyde 30-40%			x	0	0	0	-	+
glucose	x	x		+	+	+	+	+
glycerine			x	+	+	+	+	+
glycol			x	0	0	0	+	0
urea	x	x		+	+	+	+	+
fuel oil (EL)			x	+	+	+	+	+
isopropyl alcohol			x	0	0	0	+	0
caustic potash solution 10%		x		-	-	-	+	+
caustic potash solution 10-50%		x		-	-	-	0	+
caustic potash solution conc.		x		-	-	-	-	+
potassium bromate	x	x		0	0	0	+	+
potassium carbonate	x	x		+	+	+	+	+
potassium chlorate	x	x		0	0	0	+	+
potassium chloride	x	x		+	+	+	+	+
potassium chromate	x	x		0	0	0	+	+
potassium fluoride	x	x		+	+	+	+	+
potassium iodide	x	x		+	+	+	+	+
potassium nitrate	x	x		+	+	+	+	+
potassium permanganate	x	x		0	0	0	+	+
potassium phosphate	x	x		+	+	+	+	+
potassium sulphate	x	x		+	+	+	+	+
sodium chloride	x	x		+	+	+	+	+
sodium chloride solution, saturated		x		+	+	+	+	+
aqua regia		x		-	-	-	-	-
copper chloride	x	x		+	+	+	+	+
copper sulphate	x	x		+	+	+	+	+
linseed oil			x	+	+	+	+	+
magnesium chloride	x	x		+	+	+	+	+
magnesium nitrate	x	x		+	+	+	+	+
magnesium sulphate	x	x		+	+	+	+	+
maleic acid	x		x	+	+	+	+	+
manganese sulphate	x	x		+	+	+	+	+
margarine	x		x	+	+	+	+	+
machine oil			x	+	+	+	+	+
methyl acetate			x	-	-	-	-	-
methyl alcohol			x	-	-	-	+	-
methylamine			x	-	-	-	-	-
methylen chloride			x	-	-	-	-	-
methyl ethyl ketone			x	-	-	-	-	-
methyl isobutyl ketone			x	-	-	-	-	-
milk			x	+	+	+	+	+
lactic acid 10%		x		+	+	+	+	+

Media	solid	solution	liquid	UP	1K-PU	2K-PU	PMMA	EP
lactic acid conc.		X		0	0	0	0	+
mineral oil			X	+	+	+	+	+
sodium acetate	X	X		+	+	+	+	+
sodium bromate	X	X		0	0	0	0	0
sodium bromide	X	X		+	+	+	+	+
sodium carbonate	X	X		+	+	+	+	+
sodium chlorate	X	X		0	0	0	0	0
sodium chloride	X	X		+	+	+	+	+
sodium cyanide	X	X		+	+	+	+	+
sodium fluoride	X	X		+	+	+	+	+
sodium hypochlorite	X	X		+	+	+	+	+
sodium nitrate	X	X		+	+	+	+	+
sodium perborate	X	X		0	0	0	0	0
sodium perchlorate	X	X		0	0	0	0	0
sodium peroxide	X	X		—	—	—	—	—
sodium phosphate	X	X		+	+	+	+	+
sodium sulphate	X	X		+	+	+	+	+
sodium sulphite	X	X		+	+	+	+	+
caustic soda lye 10%		X		—	—	—	+	+
caustic soda lye 10-50%		X		—	—	—	0	+
caustic soda lye conc.		X		—	—	—	—	+
nickel chloride	X	X		+	+	+	+	+
nickel sulphate	X	X		+	+	+	+	+
oleum		X		—	—	—	—	—
oxalic acid	X	X	X	0	0	0	0	+
ozone				+	+	+	+	+
paraffin oil			X	+	+	+	+	+
perchloric acid < 10%		X		0	0	0	+	0
perchloric acid 70%		X		—	—	—	—	+
Persil 5%		X		+	+	+	+	+
kerosene			X	0	0	0	0	+
phenol	X		X	—	—	—	—	—
phosphoric acid 10%		X		0	0	0	+	+
phosphoric acid 50%		X		—	—	—	0	0
phosphoric acid conc.		X		—	—	—	—	—
phtalic acid	X			+	+	+	+	+
propanol			X	0	0	0	+	0
propionic acid 10%		X		0	0	0	+	0
propionic acid conc.		X		—	—	—	0	—
mercury			X	+	+	+	+	+
mercury chloride	X	X		+	+	+	+	+
castor oil			X	0	0	0	0	+
treacle			X	+	+	+	+	+
salicylic acid	X	X		0	0	+	+	+
nitric acid		X		—	—	—	—	0
nitric acid 20%		X		—	—	—	0	+
nitric acid conc.		X		—	—	—	0	0
grease	X			+	+	+	+	+
lubricating oil			X	+	0	+	+	+
sulfuric acid 10%		X		+	+	+	+	+
sulfuric acid 20%		X		+	+	+	+	+
sulfuric acid 40%		X		0	0	0	+	0

Media	solid	solution	liquid	UP	1K-PU	2K-PU	PMMA	EP
sulfuric acid 60%		X		–	–	–	+	0
sulfuric acid conc.		X		–	–	–	–	–
silver nitrate	X	X		+	+	+	+	+
cooking oil			X	+	+	+	+	+
stearic acid (fatty acid)	X	X		+	+	+	+	+
de-icing salt	X	X		+	+	+	+	+
de-icing salt moist		X		+	+	+	+	+
Styrene			X	–	–	–	–	0
tannic acid			X	+	+	+	+	+
turpentine oil			X	0	0	0	0	0
carbon tetrachloride			X	–	–	–	–	–
tetrahydrofuran (THF)			X	–	–	–	–	–
toluene			X	–	–	–	–	–
trichloroethane			X	–	–	–	–	–
trichloroethylene			X	–	–	–	–	–
triethanolamine			X	–	–	–	–	–
triethylamine		X		–	–	–	–	–
trisodium phosphate	X	X		0	0	0	0	0
urine			X	0	0	0	+	+
water (distilled)			X	+	+	+	+	+
water (see, mineral, drinking)			X	+	+	+	+	+
waterglass (sodium silicate, potassium silicate)		X		0	0	0	0	+
wine		X		+	+	+	+	+
tartaric acid	X	X		+	+	+	+	+
xylol			X	–	–	–	–	0
zinc chloride	X	X		+	+	+	+	+
zinc nitrate	X	X		+	+	+	+	+
zinc sulphate	X	X		+	+	+	+	+
tin chloride	X	X		+	+	+	+	+
citric acid	X	X		0	0	0	+	+
sugar	X	X		+	+	+	+	+
sugar moist		X		+	+	+	+	+

+ Full resistance
o limited resistance

– No resistance

– No change in the specimen after being immersed in the given medium for 60 days at 20°C
– No change in the specimen after being immersed in the given medium for 3 days at 20°C (i.e. the waterproofing system is only resistant in the case of small amounts and prompt removal of the medium)
– Severe change in the specimen immersed in the given medium

In the case of blends of chemicals and other ambient conditions, independent tests should be carried out.

Calculation Recommendation

Survey table over **estimated quantities and time** for the application of KEMPEROL® products



Published: 2021-04-29

Product	Consumption	Time
KEMPERTEC primers		
KEMPERTEC R Primer	at least 0.5 kg / m ²	approx. 5 min / m ²
KEMCO 1K Primer	at least 0.3 kg / m ²	approx. 3 min / m ²
KEMPERTEC AC Primer	at least 0.5 kg / m ²	approx. 5 min / m ²
KEMPERTEC EP Primer	at least 0.5 kg / m ²	approx. 5 min / m ²
KEMCO NQ 0408 Natural Quartz	at least 2.0 kg / m ²	approx. 1 min / m ²
KEMPERTEC EP5 primer	at least 0.5 kg / m ²	approx. 5 min / m ²
KEMCO NQ 0408 Natural Quartz	at least 2.0 kg / m ²	approx. 1 min / m ²
KEMPERTEC FPO Primer	at least 0.05 kg / m ²	approx. 3 min / m ²
KEMCO POX 2K Primer	min. 0.25 kg/m ²	approx. 5 min / m ²
KEMPERTEC Glass Primer	min. 0.03 kg/m ²	approx. 3 min/m ²
KEMPERPLAN Primer	min. 0.05 kg / m ²	approx. 3 min/m ²
Filling compound		
KEMPERTEC EP Primer		
KEMPERTEC KR Quartz Sand Mixture (Mixing ratio 1:4)	at least 2 kg / m ² / mm	approx. 7 min / m ²
KEMPERTEC EP5 primer		
KEMPERTEC KR Quartz Sand Mixture (Mixing ratio 1:2)	at least 2 kg / m ² / mm	approx. 7 min / m ²
KEMPERTEC AC Primer		
KEMPERTEC KR Quartz Sand Mixture (Mixing ratio 1:3)	at least 2 kg / m ² / mm	approx. 7 min / m ²
Repair mortar		
KEMPERTEC EP Primer		
KEMPERTEC KR Quartz Sand Mixture (Mixing ratio 1:9)	at least 2 kg / m ² / mm	approx. 7 min / m ²
KEMPERTEC EP5 primer		
KEMPERTEC KR Quartz Sand Mixture (Mixing ratio 1:5)	at least 2 kg / m ² / mm	approx. 7 min / m ²
Alkaline protection		
KEMPERTEC EP Primer with	at least 0.5 kg / m ²	approx. 6 min / m ²
KEMCO NQ 0712 Natural Quartz	at least 1.0 kg / m ²	approx. 1 min / m ²
KEMPERTEC EP5 primer with	at least 0.5 kg / m ²	approx. 6 min / m ²
KEMCO NQ 0712 Natural Quartz	at least 1.0 kg / m ²	approx. 1 min / m ²
KEMPERTEC AC Primer with	at least 0.5 kg / m ²	approx. 6 min / m ²
KEMCO NQ 0712 Natural Quartz	at least 1.0 kg / m ²	approx. 1 min / m ²
KEMPEROL sealings		
KEMPEROL 1K-PUR waterproofing with	at least 3.4 kg/m ²	approx. 12 min / m ²
KEMPEROL 165 fleece	at least 1,05 m ² / m ²	
KEMPEROL 1K-SF waterproofing with	at least 3.0 kg / m ²	approx. 12 min / m ²
KEMPEROL 165 fleece	at least 1,05 m ² / m ²	
KEMPEROL 2K-PUR waterproofing with	at least 3.0 kg / m ²	approx. 15 min / m ²
KEMPEROL 165 fleece	at least 1,05 m ² / m ²	
KEMPEROL AC Speed with	at least 2.5 kg / m ²	approx. 15 min / m ²
KEMPEROL 165 fleece	at least 1,05 m ² / m ²	
KEMPEROL AC Speed+ Sealing with	at least 2.5 kg / m ²	approx. 15 min / m ²
KEMPEROL 165 fleece	at least 1,05 m ² / m ²	
KEMPEROL PU Aqua with	at least 2.5 kg/m ²	approx. 12 min / m ²
KEMPEROL 165 fleece	at least 1,05 m ² / m ²	

KEMPEROL sealings		
KEMPEROL V 210 M waterproofing with KEMPEROL 165 fleece	at least 2.8 kg/m ² at least 1,05 m ² / m ²	approx. 15 min / m ²
KEMPEROL fleece		
for overlapping application KEMPEROL fleece	at least 1,05 m ² / m ²	refer to waterproofing
for butt jointed application KEMCO RS Reinforcement Strip	at least 1,0 m ² / m ² approx. 1 linear m / joint	refer to waterproofing
KEMPEROL TP talcum (for KEMPEROL V 210 M)		
KEMPEROL TP talcum	at least 0.1 kg / m ²	approx. 3 min / m ²
KEMPERDUR AC Park and KEMPERDUR AC Park+		
KEMPERDUR AC Park with KEMPERDUR AC filler	at least 1.2 kg / m ² at least 2.8 kg / m ²	approx. 15 min / m ²
KEMPERDUR AC Park+ with KEMPERDUR AC Park+ special filler	at least 1.5 kg / m ² at least 2.5 kg / m ²	approx. 15 min / m ²
KEMPERDUR AC-Finish	at least 0.6 kg / m ²	approx. 3 min / m ²
KEMPERDUR AC coating		
KEMPERDUR AC coating with KEMPERDUR AC filler	at least 1.5 kg / m ² at least 2.8 kg / m ²	approx. 12 min / m ²
KEMPERDUR AC-Finish* with KEMPERDUR CS Microchips	at least 0.6 kg / m ² at least 0.1 kg / m ²	approx. 3 min / m ² approx. 2 min / m ²
KEMPERTEC AC GF Gradient filler and KEMPERTEC AC RM Repair Mortar		
KEMPERTEC AC GF Gradient filler	at least 2.1 kg / m ²	approx. 18 min / m ²
KEMPERTEC AC RM Repair Mortar	at least 1.4 kg / m ²	approx. 18 min / m ²
KEMPERDUR HB thick coating		
for horizontal surfaces KEMPERDUR HB thick coating and KEMPERDUR CL Chips	at least 6 kg / m ² at least 0.03 kg / m ²	approx. 15 min / m ² approx. 2 min / m ²
for vertical surfaces KEMPERDUR Deko 2K*	at least 0.4 kg / m ²	approx. 8 min / m ²
KEMPERDUR Finish glossy		
KEMPERDUR Finish glossy	at least 0.2 kg / m ²	approx. 5 min / m ²
KEMPERDUR TC coating		
KEMPERDUR TC coating and KEMCO NQ 0712 Natural Quartz (incl. sweeping to remove excess natural quartz)	at least 4.0 kg / m ² at least 5.0 kg / m ²	approx. 8 min / m ² approx. 5 min / m ²
KEMPERDUR TC coating and KEMPERDUR CQ 0408 Colorquartz (incl. sweeping to remove excess coloured quartz)	at least 4.0 kg / m ² at least 4.0 kg / m ²	approx. 8 min / m ² approx. 5 min / m ²
KEMPERDUR TC coating and KEMCO Coloured quartz incl. sweeping off the surplus color quartz)	at least 4.0 kg / m ² at least 4.0 kg / m ²	approx. 8 min / m ² approx. 5 min / m ²
KEMPERDUR Finish matt*		
KEMPERDUR Finish matt	at least 0.2 kg / m ²	approx. 5 min / m ²
Bonding coat		
KEMPERTEC EP Primer with KEMCO NQ 0408 Natural Quartz	at least 0.3 kg / m ² at least 2.0 kg / m ²	approx. 5 min / m ² approx. 1 min / m ²
KEMPERTEC EP5 primer with	at least 0.3 kg / m ²	approx. 5 min / m ²

Bonding coat		
KEMCO NQ 0408 Natural Quartz	at least 2.0 kg / m ²	approx. 1 min / m ²
KEMCO 1K Primer with KEMCO NQ 0408 Natural Quartz	at least 0.3 kg / m ² at least 2.0 kg / m ²	approx. 3 min / m ² approx. 1 min / m ²
KEMCO Decor Stone / Natural Stones		
Bonding bridge		
KEMPERTEC EP Primer with KEMCO NQ 0408 Natural Quartz	at least 0.3 kg / m ² at least 0.3 kg / m ²	approx. 5 min / m ² approx. 1 min / m ²
KEMPERTEC EP5 primer with KEMCO NQ 0408 Natural Quartz	at least 0.3 kg / m ² at least 0.3 kg / m ²	approx. 5 min / m ² approx. 1 min / m ²
KEMCO QB1 Binder KEMCO Decor Stone / Natural Stones	at least 18 kg / m ²	approx. 20 min / m ²
Mixing ratio 1.75 kg package binding agents at 25 kg Decor Stones / Natural Stones)		
KEMPERDUR Quartz covering		
KEMPERDUR Deko transparent	at least 0.3 kg / m ²	approx. 4 min / m ²
KEMPERDUR CQ 0408 Colorquarz or KEMCO Coloured quartz	at least 4.0 kg / m ²	approx. 3 min / m ²
KEMPERDUR Deko transparent as a sealing coat (incl. sweeping to remove excess coloured quartz)	at least 0.4 kg / m ²	approx. 10 min / m ²
KEMPERDUR Deko*		
KEMPERDUR Deko	at least 1.2 kg / m ²	approx. 6 min / m ²
KEMPERDUR CL Chips	at least 0.03 kg / m ²	approx. 2 min / m ²
KEMPERDUR Finish matt	at least 0.2 kg / m ²	approx. 3 min / m ²
KEMPERDUR Deko 2K*		
KEMPERDUR Deko 2K and KEMPERDUR CL Chips	at least 1.2 kg / m ² at least 0.03 kg / m ²	approx. 8 min / m ² approx. 2 min / m ²
KEMPERDUR EP-Finish*		
KEMPERDUR EP-Finish color	at least 1.0 kg / m ²	approx. 8 min / m ²
KEMPEROL 022 waterproofing		
KEMPERTEC TG Primer	at least 0.15 kg / m ²	approx. 3 min / m ²
KEMPEROL 022 waterproofing	at least 2.0 kg / m ²	approx. 15 min / m ²
KEMPEROL 500 fleece	at least 1,05 m ² / m ²	
KEMPERDUR MT mineral tile adhesive	at least 1.6 kg / m ²	approx. 10 min / m ²
KEMPEROL FALLSTOP		
KEMPEROL FALLSTOP	at least. 0.4 kg / m ² / operation (1.6 kg/m ² total consumption **)	approx. 15 min / m ² / step
KEMPERDUR LASI coating		
KEMPERDUR LASI Basic Coating	min. 0.45 kg/m ²	approx. 5 min / m ² / operation
KEMPERDUR LASI Filler F0510 Special Spreading	min. 5 kg/m ²	approx. 4 min / m ² / operation
KEMPERDUR LASI Filler R1020 Special Spreading	min. 4.0 kg/m ²	approx. 4 min / m ² / operation
KEMPERDUR LASI Finish Covering Layer	min. 0.75 kg/m ²	approx. 7 min / m ² / operation

This table serves as a guidance for the contractor and should only be seen as a recommendation. Please refer to the relevant technical data sheets for the combination of primers, waterproofings and surfacings. Not all product combinations are possible!

Depending on the details the consumption can increase by approx. 20%.

For details such as flat roof drains, flat roof vents, wall connections, skylight dome etc. a time increase of approx. 100% used for calculation. For smaller surfaces (< 50 m²) approx. 2 min should be added to the mixing time!

When calculating the consumption of fleece, consider 5 cm overlap.

(*) For these products, information regarding time and consumption refer to one application / work step.

(**) Total consumption 1.6 kg/m² The material must be applied evenly in four working steps of at least 400 g/ m². (corresponds to 400 µm on the measuring comb)



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