

TECHNICAL BULLETIN

COROFLAKE® 68 M PRIMER

Product Description: COROFLAKE® 68 M PRIMER is a low viscosity, 85% solids epoxy compound, designed for use as a primer for concrete and steel. This formulation results in excellent penetrating of concrete, to cure in presence of moisture and low temperatures. It will also hold abrasive blasted steel surfaces against rusting until protective epoxy coating or lining is applied. As a sealer for concrete it will reduces dusting and improves wearability and cleanability.

Recommended Uses: COROFLAKE® 68 M PRIMER is generally used as a protective primer for metal and concrete but it has numerous other uses. As a binder for filling air voids and bug holes in concrete surfaces. As a Saturant Liquid for the reinforcement in TIP TOP epoxy lining and flooring systems. It is also recommended as a sealer for light-duty process floors.

Temperature Resistance: +80 °C

Generic Type: Epoxy Resin

Filler: None

Design:

The steel and concrete construction to be coated must be fabricated according to the EN 14879-1:2005. For concrete structures also refer to DIN 1045. Further information can be taken from our steel or concrete specifications.

Preparation:

<u>Concrete</u>

Contaminants such as oil or grease must be removed prior to the application. The best preparation is abrasive blast to open holes covered with cement and to roughen the surface. The resulting surface should be at least as rough as 40 grit sand paper. Concrete should be thoroughly cured for at least 28 days. Use plastic sheet method (ASTM 4263) to ensure the moisture content is less as 4%. The cured concrete should have a minimum compressive strength of 25 N/mm² and a minimum. surface strength of 1.5 N/mm².

<u>Steel</u>

Steel substrates, which were under service conditions already, require a chemical check for the presence of invisible traces of iron sulphate and or iron chloride. If the check is positive, the total surface area needs to be washed down thoroughly with de-ionised water. In each case, steel substrate shall be prepared by abrasive blasting to obtain a Sa $2\frac{1}{2}$ surface, as defined in DIN EN ISO 12 944-4 and a minimum surface profile @ 60 µm "Coarse (G)" as defined in DIN EN ISO 8503-2.

 Build-up of the system:
 Coverage

 TOPLINE 68 M PRIMER Steel
 1 x 50-100 μm
 150 g/m²

 TOPLINE 68 M PRIMER Concrete
 1 x 100-200 μm
 300 g/m²

 TOPLINE 68 M Sealer
 2 x 100-200 μm
 2 x 300 g/m²

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| Mixing Ratio: | Mix 15,4 kg COROFLAKE ® 68 M Primer with 4,6 kg Hardener No.4. Stir hardener into the primer thoroughly using a low speed mechanical agitator. | |
|------------------------|---|--|
| Pot Life: | 2 hrs. (+10°°C) ³ / ₄ hr. (+20°C) ¹ / ₂ hr. (+30°C) | |
| Application Equipment: | Conventional Air or Airless Spray, Brush and Roller | |
| Application: | <i>Note:</i> During application the surface must be shaded from direct or indirect sunlight. It may result in intercoat disbondment. | |
| | COROFLAKE® 68 M PRIMER is normally applied by brush or roller. Spray application can be used, but requires extra clean surface. The air temperature shall be $@+5^{\circ}$ C to +40°C and the substrate temperature shall be $@+2^{\circ}$ C (3°K above dew point). Primer may be recoated after initial set, which will occur normally after 8 hours, first coat must be applied within seven days. | |
| | <i>Note:</i> In atmosphere <i>COROFLAKE</i> ® 68 <i>M PRIMER</i> as a sealer has a tendency to chalking with the time. | |
| Cleaning: | Solvent T-100 | |
| Shelf Life: | The shelf life is 12 months when stored $@ + 20^{\circ}C$. | |
| | COROFLAKE® 68 M PRIMER and Hardener No.4 should be stored at a cool and dry place. | |
| Density: | 1.12 kg/l (mixed) | |
| Viscosity: | 350 mPas | |
| Solid Content: | 85% | |
| Flash Point: | COROFLAKE® 68 M PRIMER +42°C; Hardener No.4 +109°C | |
| Tensile Modulus: | 700-800 MPa (ASTM C 307 modified) tangent | |
| Tensile Strength: | 13-15 MPa (ASTM C 307 modified) | |
| Tensile Elongation: | 20-30% (ASTM C 307 modified) | |
| Adhesion: | 7.0 N/m ² (DIN ISO 24624) to grit blasted C-Steel; 1.5 N/mm ² on concrete | |
| Hardness: | 30 Barcol (DIN EN 59) | |

This Technical Bulletin is for informational purposes only. All data provided herein is based on in-depth research and testing, however no liability whatsoever can be assumed. Since we are constantly endeavouring to up-date and improve our products, we recommend noting the index and issue date indicated on this data sheet and to inquire as to whether any properties have changed in the interim. This Product Information Sheet replaces all prior issues. Please contact our Technical Consultant for detailed information in case of ambiguities.

TIP TOP Oberflächenschutz Elbe GmbH, Heuweg 4, D-06886 Wittenberg Telephone: (0 34 91) 6 35 – 50, Telefax: (0 34 91) 6 35 – 5 52

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