

## TECHNICAL BULLETIN

### **COROFLAKE 68 PRIMER**

- Product Description:** ***COROFLAKE 68 PRIMER*** is a specialized epoxy formulation, 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 reduce dusting and improves wearability and cleanability.
- Recommended Uses:** ***COROFLAKE 68 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 for the reinforcement in TIP TOP epoxy linings and floorings. It is also recommended as a sealer for light-duty process floors.
- Temperature Resistance:** + 80 °C wet
- Generic Type:** Epoxy Resin
- Filler:** Non
- Solvent:** Non
- 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:**
- Concrete**  
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 than 4%. The cured concrete should have a minimum compressive strength of 25 N/mm<sup>2</sup> and a minimum surface strength of 1.5 N/mm<sup>2</sup>.
- Steel**  
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 2½ 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.

<b>Build-up of the system:</b>			Coverage
	<b>COROFLAKE 68 PRIMER</b>		
	Steel	Liquid + HARDENER No. 4	150 g/m <sup>2</sup>
	<b>COROFLAKE 68 PRIMER</b>		
	Concrete	Liquid + HARDENER No. 4	300 g/m <sup>2</sup>
	<b>COROFLAKE 68 PRIMER</b>		
	as Sealer	Liquid + HARDENER No. 4	2 x 300 g/m <sup>2</sup>
<b>Mixing Ratio:</b>	Mix 12 kg <b>COROFLAKE 68 PRIMER</b> with 3.6 kg HARDENER No.4 minimum two minutes. Stir hardener into the primer thoroughly using a low speed mechanical agitator. During application observe pot life limitations.		
<b>Pot Life:</b>	2 hrs. (+ 10 °C)	1 hr. (+ 20 °C)	½ hr. (+ 30 °C)
<b>Application Equipment:</b>	Conventional Air or Airless Spray, Brush and Roller		
<b>Application:</b>	<p><b>COROFLAKE 68 PRIMER</b> is normally applied by brush or roller. Spray application can be used, but requires extra clean surface. Primer may be recoated after initial set, which will occur normally after 12 hours, first coat must be applied within seven days. The mentioned values are applicable at 20 °C.</p> <p>Note: In atmosphere <b>COROFLAKE 68 PRIMER</b> as a sealer has a tendency to chalking with the time.</p> <p>Note: During application the surface must be shaded from direct or indirect sunlight. It may result in intercoat disbondment.</p>		
<b>Cleaning:</b>	Solvent T-100		
<b>Shelf Life:</b>	The shelf life is 12 months when stored @ + 20 °C. <b>COROFLAKE 68 PRIMER</b> and HARDENER No. 4 should be stored at a cool and dry place.		
<b>Drying Time:</b>	24 hrs. (+ 10 °C)	12 hrs. (+ 20 °C)	8 hrs. (+ 30 °C)
<b>Density:</b>	1.12 kg/l (mixed)		
<b>Viscosity:</b>	350 mPas ± 50 Brookfield		
<b>Solid Content</b>	100 %		
<b>Flash Point:</b>	<b>COROFLAKE 68 PRIMER</b>	+ 95 °C	
	HARDENER No. 4	+ 109 °C	
<b>Tensile Modulus:</b>	700 - 800 MPa (ASTM C 307 modified) tangent		
<b>Tensile Strength:</b>	13 -15 MPa (ASTM C 307 modified)		
<b>Tensile Elongation:</b>	20 – 30 % (ASTM C 307 modified)		
<b>Adhesion:</b>	7.0 N/m <sup>2</sup> (EN ISO 4624) to grit blasted C-Steel; 1.5 N/mm <sup>2</sup> to concrete		

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.

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