

# TECHNICAL BULLETIN

## COROFLOOR 682

**Product Description:** **COROFLOOR 682** based on a specialized epoxy formulation, designed for use of critical process areas where chemical resistance, thermal shock resistance, sanitation, and aesthetic appearance are required. It consists of a penetrating primer, a flexible fibreglass reinforcement, a semi self-levelling body coat, and as an option a final slip resistant topcoat. Total thickness is a nominal 3.0 mm.

**Recommended Uses:** **COROFLOOR 682** is used in high humidity areas in the pharmaceutical, food and beverage industries, but due to the unique properties of the system, there are many applications in the chemical process industry. **COROFLOOR 682** is particularly suited for non-basement floors and there, where a moist substrate is combined with low temperature.

**Temperature Resistance:** +75°C Continuous Service +100°C Intermittent Service

**Generic Type:** Epoxy Resin

**Design:** Attention should be given to the influence of temperature and load in order to minimise the tension- and bending stresses in the concrete. This is important to reduce the risk of cracks in the concrete and **COROFLOOR 682**. Minimum tensile strength should be 1.5 Map when tested according to DIN ISO 24 624.

**Preparation:** Contaminants such as oil or grease must be removed prior to the application. The best preparation is abrasive blast to open holes covert with cement and to roughen the surface. The resulting surface should be at least as rough as 40 grit sandpaper. Concrete should be thoroughly cured for 28 days.

Build-up of the system:	Coverage
<b>COROFLAKE 68</b> Primer	300 g/m <sup>2</sup>
<b>COROFLAKE 68</b> as Saturant	500 g/m <sup>2</sup>
Fibreglass reinforcement	250 g/m <sup>2</sup>
<b>COROFLOOR 682</b> Body Coat	2,500g/m <sup>2</sup>
<b>COROFLOOR 682</b> Topcoat	250g/m <sup>2</sup>

**Mixing Ratio:** For all mixing activities use a low speed (200 to 300 rpa) mechanical agitator. For Primer and Saturant: Mix **COROFLAKE® 68** Primer to Hardener No.4 in a ratio 3.3 to 1 (weight). Stir thoroughly for two minutes. For Body Coat: Mix the A- and B-components of Body Coat in a ratio 6.6 A to 1 B (weight). Stir thoroughly for three minutes till a homogeneous liquid is obtained. For Topcoat: Mix the A- and B-components of Topcoat in a ratio 2.7 A to 1 B (weight). Stir thoroughly for three minutes till a homogeneous liquid is obtained.

<b>Pot Life:</b>	Primer: 120 min. (+10°C) 60 min. (+20°C) 30 min. (+30°C) Body Coat: 90 min. (+10°C) 45 min. (+20°C) 30 min. (+30°C) Topcoat: 75 min. (+10°C) 40 min. (+20°C) 20 min. (+30°C)
<b>Application Equipment:</b>	Brush, Spiked Roller, Ribbed Roller, Squeegee and Notched Trowel
<b>Application:</b>	It is recommended that the Primer be applied by brush or mohair roller. Let primer cure. Be certain the cured primer is clean. Use a squeegee or roll out approximately 1.0 mm of Saturant and press glass mat into Saturant. Wet out mat with additional Saturant until mat is translucent. Use a ribbed roller to remove air from the mat. Let reinforcement cure. Apply 0.8 to 1.2 mm Body Coat using a notched trowel. A spiked roller should be used on the surface, to remove any trapped air. Allow to cure. Roller apply Topcoat.
<b>Cleaning:</b>	T-100
<b>Shelf Life:</b>	The shelf life is 24 months when stored @ + 20°C. All <b>COROFLOOR</b> components should be stored at a cool and dry place.
<b>Solid Content:</b>	100%
<b>Flash Point:</b>	<b>COROFLAKE® 68</b> PRIMER / SATURANT +95°C; Hardener No.4 +109°C <b>COROFLOOR 682</b> Body Coat Comp. A + 51°C Comp. B +106°C <b>COROFLOOR 682</b> Topcoat Comp. A -1°C Comp. B +26°C
<b>Compressive Strength:</b>	40 MPa (DIN EN ISO 604)
<b>Tensile Strength:</b>	33 MPa (DIN EN ISO 527)
<b>Crack Bridging:</b>	0 to 0.6 mm (DfBT Test)
<b>Adhesion:</b>	1.5 N/mm² (EN ISO 4624) concrete failure
<b>Hardness:</b>	73 Shore D (DIN 53 505)
<b>Abrasion:</b>	37 mg (ASTM – D 4060)

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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