

## **TECHNICAL BULLETIN**

## COROFLAKE 24 M

**Product Description: COROFLAKE 24 M** is a Bisphenol-A vinyl ester mat reinforced lining system. This lining system consists of one primer @ 50 μm nominal, one base coat, one fibre glass mat and a flake filled topcoat to produce a total DFT of 2.0 mm to 3.0 mm. This high performance lining system is capable of bridging cracks in concrete structures.

**Recommended Uses: COROFLAKE 24 M** is developed for protection of concrete surfaces against the attack of abrasive and corrosive chemicals. Ideal for concrete floors, tanks, trenches, sumps and foundations in aggressive environments.

Temperature Resistance: + 80 °C wet + 120 °C dry

Generic Type: Bisphenol-A Vinyl Ester

Filler: Silica filler and Inert-Flakes

Solvent: Styrene (reactive)

**Design:** The concrete construction to be lined must be fabricated according to the EN 14879-1:2005. Cracks should be smaller than 0.2 mm. Further information can be taken from our concrete specifications.

**Concrete** 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 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/mm<sup>2</sup> and a minimum surface strength of 1.5 N/mm<sup>2</sup>.

Build-up of the system:			Coverage
	COROFLAKE N PRIMER	Primer + HARDENER No. 1	300 g/m²
	Base coat	<i>LINING 65</i> Resin + HARDENER No.1 Filler F-1 Powder	1,000 g/m² 2,500 g/m²
	Reinforcement	<i>LINING 65</i> Resin + HARDENER No.1 Glass mat 300 g/m²	660 g/m² 330 g/m²
	Topcoat	<i>COROFLAKE 24</i> liquid + HARDENER No. 1	1 x 1,100 g/m²
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Mixing Ratio:

**Preparation:** 

100:2 resin to HARDENER No. 1 by weight and 1:2,5 catalysed mixture to Filler F-1. Mix always hardener into resin-based component, using a low speed mechanical agitator.

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Pot Life:	1 ½ hrs. (+ 10 °C)	1 hrs. (+ 20 °C)	½ hrs. (+ 30 °C)
Application Equipment:	Conventional Air or Airless Spray, Brush and Roller.		
Application:	<b>COROFLAKE N</b> PRIMER is normally applied by brush or roller. The substrate and air temperature shall be at $+ 8$ °C to $+ 36$ °C (3 K above dew point). Refer to the Application Instruction for further details.		
Cleaning:	Solvent T-100		
Shelf Life:	The shelf life is 6 months when stored @ + 20 °C. <b>COROFLAKE 24</b> Resin, Primer and HARDENER No. 1 should be stored at a cool and dry place.		
	Basecoat	COROFLAKE 24	4
Density:	2.0 kg/l (mixed)	1.2 kg/l (mixed)	
Viscosity:	semi thixotropic	3,250 mPas +/-	250
Flash Point:	LINING 65 Resin	+ 32 °C	
	COROFLAKE 24	+ 32 °C and	
	HARDENER No. 1	+ 70 °C	
Modulus of Elasticity:	3,500 – 3,800 MPa (DIN EN ISO 178) flexural		
Compressive Strength:	60 MPa (DIN EN ISO 604)		
Tensile Strength:	75 MPa (DIN EN ISO 527)		
Coefficient of Expansion:	25 - 30 x 10 <sup>-6</sup> 1/°C (ASTM D 696-90) linear		
Abrasion:	92 mg (ASTM – D 4060)		
Adhesion:	1.5 N/mm <sup>2</sup> (BN ISO 4624) concrete failure		
Hardness:	35 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.

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