

TECHNICAL BULLETIN

TOPLINE W FOR CONCRETE

Product Description: *TOPLINE W* is a three component, powder filled Bisphenol-A-vinyl ester lining system. This system consists of one trowel applied body coat, a 300 g/m² fibreglass mat as reinforcement and a trowel applied special filled resin topcoat to produce a total DFT of 3.0 – 4.0 mm nominal.

Recommended Uses: This high performance lining system possesses outstanding resistance to a wide range of aggressive environments such as limestone slurry, gyp-sum and other suspensions. It is designed especially for the protection of concrete against the attack of abrasive reagents.

Temperature Resistance: + 75 °C wet

Generic Type: Bisphenol-A- Vinyl Ester

Filler: Silica and Aluminium Oxide

Solvent: Styrene (reactive)

Design: The concrete construction to be lined must be fabricated according to the EN 14879-1:2005. Further information can be taken from our 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 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/mm² and a minimum surface strength of 1.5 N/mm².

Build-up of the system:		Coverage
COROFLAKE N PRIMER	Liquid + HARDENER No. 1	300 g/m ²
<i>TOPLINE W</i> Body Coat	Liquid + HARDENER No. 1	1,000 g/m ²
	F-1 Filler	2,400 g/m ²
<i>TOPLINE W</i> Reinforcement	Liquid + HARDENER No. 1	660 g/m ²
	E- Glass mat 300 g/m ²	330 g/m ²
<i>TOPLINE W</i> Topcoat	Liquid + HARDENER No. 1	1,000 g/m ²
	W-1 Filler	2,600 g/m ²
	Smoothing Liquid F-12	150 g/m ²

Mixing Ratio: 100:2 resin to hardener by weight. Mix hardener into liquid using a low speed mechanical agitator. For body coat, stir 2,400 g of F1 filler slowly into 1,000 g of the mixed resin until it becomes a well dispersed semi-thixotropic mortar. For the topcoat, instead of the F1 filler add 2,600 g W1filler.

Pot Life:	1 ½ hrs. (+ 10 °C)	1 hr. (+ 20 °C)	½ hr. (+ 30 °C)
Application Equipment:	By Trowel and Roller.		
Application:	During application observe pot life limitations. Note: During application the lined surface must be shaded from direct or indirect sunlight. Otherwise intercoat disbondment may occur. Refer to the application instruction for further hints.		
Cleaning:	Solvent T-100		
Shelf Life:	The shelf life is 6 months when stored @ + 20 °C. The lining liquid, primer and hardener should be stored in cool and dry places.		
Density:	1.85 kg/l (mixed with filler)		
Viscosity:	semi thixotropic		
Flash Point:	TOPLINE W Resin	+ 32 °C and	
	HARDENER No. 1	+ 70 °C	
Modulus of Elasticity:	7,000 – 10,000 MPa (DIN EN ISO 178) flexural		
Tensile Strength:	20 Mpa (DIN EN ISO 527)		
Compressive Strength:	85 MPa (DIN EN ISO 604)		
Coefficient of Expansion:	27 - 30 x 10 ⁻⁶ 1/°C (ASTM D 696-90)		
Abrasion:	30 mg (ASTM – D 4060)		
Permeation:	0.0031 perm-inch (ASTM – E 96 - 90 Procedure E)		
Adhesion:	1.5 N/mm² (EN 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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