TECHNICAL BULLETIN

KTL LINING - Mat reinforced Lining

Product Description: KTL LINING is a vinyl ester mat reinforced lining system. This lining system consists of one primer, two fibre glass mats and a flake filled topcoat to produce a total DFT of 2.0 mm to 3.0 mm. This lining provides outstanding chemical resistance.

Recommended Uses: KTL LINING was developed specifically for electro-deposition tanks. These tanks are subject to constant immersion of paint solution that can be very corrosive. In addition, the paint will stick on the surface and will create deposit build-up. In addition to this outstanding chemical resistance, KTL LINING provides non-stick properties.

Temperature Resistance: +60 °C wet

Generic Type: Vinyl Ester

Filler: PTFE - Flakes

Solvent: Styrene (reactive)

Design: DIN 28051 and DIN 28053

Preparation: Contaminants such as oil or grease must be removed prior to the grit blasting. The substrate shall be prepared by abrasive blasting to obtain a Sa 2½ surface, as defined in DIN EN ISO 12944-4 and a minimum surface profile @ 60 µm "Medium (G)" as defined in DIN EN ISO 8503-2.

Build-up of the system:

	Coverage
Primer: COROFLAKE N PRIMER	150 g/m²
Reinforcement: LINING 74 Resin + Hardener No.1	2000 g/m²
Two Glass mats 450 g/m²	1000 g/m²
Topcoat: COROFLAKE LSE + Hardener No.1	900 g/m²

Mixing Ratio: 100:2; COROFLAKE N, Lining 74 and COROFLAKE LSE Liquid to Hardener No.1 by weight. Mix always hardener into resin based component, using a low speed mechanical agitator.

Pot Life: 1½ hrs. (+10°C)   1 hr. (+20°C)   ½ hr. (+3O°C)

Application Equipment: Brush, Roller, and Conventional Air or Airless Spray

Application: Prime grit blasted surface with COROFLAKE N Primer by brush or roller. The substrate and air temperature shall be at +8°C to +32°C (3 K above dew point). Allow to harden. Wet the primed surface with LINING 74 resin. Press the first glass mat into the wet surface, then saturate and roll with the LINING 74 resin until the mat has lost its white colour. Repeat this step for the second glass mat. The second layer must be placed so that the adjoining second layer is lapped on a different place that the first layer. All joints must be lapped at least 25 mm. Allow to harden until the reinforcement can be sanded. Apply COROFLAKE LSE in one coat utilising an airless or conventional air spray system.

Cleaning: T/100

Shelf Life: The shelf life is 3 months when stored @ + 20°C.

LINING 74 resin, COROFLAKE LSE and Hardener No.1 should be stored at a cool and dry place.

	LINING 74 Resin	**COROFLAKE® LSE**
Density:	0.96 kg/l (mixed)	1.2 kg/l (mixed)
Viscosity:	550 mPas +/- 150	2700 mPas +/- 250
Flash Point:	LINING 74 resin and COROFLAKE LSE +32°C	Hardener No.1 +70°C
Modulus of Elasticity:	3700-4000 MPa (DIN EN ISO 178) flexural	
Tensile Strength:	45 MPa (DIN EN ISO 527)	
Compressive Strength:	65 MPa (DIN EN ISO 604)	
Dielectric Strength:	18 kV/mm (ASTM D 149)	
Electrical Resistivity:	10^{14} Ohm cm (ASTM D 257)	
Coefficient of Expansion:	25 - 30x10^{-6} 1/°C (VDE 0304) linear	
Adhesion:	7 MPa (EN ISO 6426)	
Hardness:	70 Shore D (DIN 5305)	
Impact Strength:	22 J/m (ASTM D 256)	