

TECHNICAL BULLETIN

TIP TOP LINING 64 FOR STEEL

- Product Description:** *TIP TOP LINING 64* is a three component, powder filled, mat reinforced polyester lining system. This system consists of one trowel applied body coat, two 450 g/m² fiberglass mats as reinforcement, one surface veil and two resin rich topcoats to produce a total DFT of 3.0 mm to 4.0 mm.
- Recommended Uses:** This lining system provides excellent corrosion resistance for most conditions in chlorine processes and metal finishing, including chromic acid. Through its unique properties, the lining is designed for meeting a multitude of demanding, diverse chemical environments and chlorine plants.
- Temperature Resistance:** + 75 °C wet
- Generic Type:** Het-acid polyester
- Filler:** Silica filler
- Solvent:** Styrene (reaktiv)
- Design:** The steel construction to be coated must be fabricated according to the DIN EN 14879-1:2005. Further information can be taken from our steel specification documents.
- 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 |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| <i>COROFLAKE N Primer</i> for steel | Resin and Hardener No. 1 | 150 g/m ² |
| <i>TIP TOP LINING 64</i>
Base coat | Resin and Hardener No. 2
F-1 Powder | 1.000 g/m ²
2.500 g/m ² |
| <i>TIP TOP LINING 64</i>
Reinforcement | Resin and Hardener No. 2
two E-Glass mat 450 g/m ²
one C-Surface veil 30g/m ² | 2.000 g/m ²
1.000 g/m ²
33 g/m ² |
| <i>TIP TOP LINING 64</i>
Topcoat | Resin and Hardener No. 2
Thin Film Curing Aid | 300 g/m ²
10 g/m ² |
- Mixing Ratio:** 100 : 2 *COROFLAKE N Primer* to Hardener No.1 by weight. 100 : 1,5 *TIP TOP LINING 64* to Hardener No. 2 by weight. Mix hardener into liquid using a low speed mechanical agitator. For base coat, stir 2500 g of the silica filler slowly into the 1000 g of the mixed resin until it's a well-dispersed semi-thixotropic mortar.
- Pot Life:** 1 ½ hrs. (+ 10 °C) 1 hr. (+ 20 °C) ½ hr. (+ 30 °C)

Application:	The substrate and air temperature shall be at +8°C to +32°C (3 K above dew point). All relevant surfaces should be primed. Allow to cure. Trowel on an even coat of the mixed mortar to achieve a uniform thickness at 1.5 mm. Press the first glass mat into the body coat, then saturate and roll with the mixed resin until the mat has lost white colour. Repeat this step for the second glass mat and for the surface veil. Allow to cure. Roll first mixed topcoat, and after curing final topcoat. For more details refer to the installation procedures.
Clean-up:	Use T-100 or MEK
Shelf Life:	The shelf life is 4 months when stored at +20°C. The lining resin, primer and hardeners should be stored in cool and dry place.
Specific Weight:	1,1 kg/l
Viscosity:	450 mPas +/- 50
Flash Points:	TIP TOP LINING 64 Resin + 32 °C Hardener No. 1 + 70 °C Hardener No. 2 + 99 °C
Modulus of Elasticity:	5.000 – 7.000 MPa (DIN EN ISO 178) flexural
Tensile Strength:	40 MPa (DIN EN ISO 527)
Compressive Strength:	70 MPa (DIN EN ISO 604)
Coefficient of Expansion:	30 x 10 ⁻⁶ 1/°C (ASTM D 696-90) linear
Permeation:	0,006 perm-inch (ASTM – E 96 - 90 Procedure E)
Adhesion:	7 N/mm ² (EN ISO 4624) to C-Steel
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.

TIP TOP Oberflächenschutz Elbe GmbH, Heuweg 4, D-06886 Wittenberg
Telefon: (0 34 91) 6 35 – 50, Telefax: (0 34 91) 6 35 – 5 52

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