

# TECHNICAL BULLETIN

## COROFLAKE LSE

<b>Product Description:</b>	<b>COROFLAKE LSE</b> is a two component, inert flake filled, Novolac vinyl ester coating system. This coating system consists of one primer, one <b>COROFLAKE 23</b> or one <b>COROFLAKE 28</b> base coat and one <b>COROFLAKE LSE</b> topcoat @ 500 - 700 µm WFT per coat to produce a total DFT of 1,000 µm nominal. The topcoat has a low surface energy, which exhibits “non stick” characteristics. In addition to these “non stick” properties, it provides outstanding chemical and thermal resistance.		
<b>Recommended Uses:</b>	<b>COROFLAKE LSE</b> low surface energy coating results in the reduction of deposit build-up on the coating from chemical processes, thereby preserving their efficiency and reducing the maintenance time. It should be used in immersion service subjected to slurry deposits and in operations exposed to process build-up.		
<b>Temperature Resistance:</b>	+ 50 °C wet	+ 180 °C dry	
<b>Generic Type:</b>	Novolac Vinyl Ester		
<b>Filler:</b>	PTFE Flakes		
<b>Solvent:</b>	Styrene (reactive)		
<b>Design:</b>	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.		
<b>Preparation:</b>	Steel substrates, which were under service conditions already, require a chemical check for the presence of invisible traces of iron sulphate and or iron chloride. If the check is positive, the total surface area needs to be washed down thoroughly with de-ionised water. In each case, steel substrate shall be prepared by abrasive blasting to obtain a Sa 2½ surface, as defined in DIN EN ISO 12 944 Part 4 and a minimum surface profile @ 60 µm “Medium (G)” as defined in DIN EN ISO 8503-2.		
<b>Build-up of the system:</b>		Layer Thickness	Coverage
	<b>COROFLAKE S</b> PRIMER	1 x 40 - 60 µm	300 g/m²
	<b>COROFLAKE 23</b> or <b>28</b> Base Coat	1 x 500 – 700 µm	1,100 g/m²
	<b>COROFLAKE LSE</b> Topcoat	1 x 500 – 700 µm	1,100 g/m²
<b>Mixing Ratio:</b>	100:2; <b>COROFLAKE S</b> PRIMER, <b>COROFLAKE 23</b> or <b>COROFLAKE 28</b> and <b>COROFLAKE LSE</b> Liquid to HARDENER No. 1 by weight. Mix hardener into resin based component, using a low speed mechanical agitator.		
<b>Pot Life:</b>	1 ½ hrs. (+ 10 °C)	1 hrs. (+ 20 °C)	½ hrs. (+ 30 °C)
<b>Application Equipment:</b>	Conventional Air or Airless Spray, Brush and Roller.		

<b>Application:</b>	Primer is normally applied by brush or roller. <b>COROFLAKE 23</b> or <b>COROFLAKE 28</b> and <b>COROFLAKE LSE</b> shall be applied utilizing an airless or conventional air spray system. Substrate and air temperature shall be @ + 10 °C to + 36 °C (3 K above dew point). Primer may be recoated after initial set, which will occur normally after 4 hours, first coat must be applied within seven days. The following coat should be applied no more than three days later.		
<b>Cleaning:</b>	Solvent T-100		
<b>Shelf Life:</b>	The shelf life is 3 months when stored @ + 20 °C. <b>COROFLAKE 23</b> or <b>28</b> Resin, Primer and HARDENER No. 1 should be stored at a cool and dry place.		
<b>Density:</b>	1.2 kg/l (mixed)		
<b>Viscosity:</b>	2,700 mPas ± 250		
<b>Flash Point:</b>	<b>COROFLAKE LSE</b> rein	+ 32 °C and	
	HARDENER No. 1	+ 70 °C	
<b>Modulus of Elasticity:</b>	2,500 – 3,500 MPa (DIN EN ISO 178) flexural		
<b>Tensile Strength:</b>	20 Mpa (DIN EN ISO 527)		
<b>Elongation at Tear:</b>	0.25 % - 0.50 (DIN EN ISO 527)		
<b>Coefficient of Expansion:</b>	25 - 30 x 10 <sup>-6</sup> 1/°C (ASTM D 696-90) linear		
<b>Impact Strength:</b>	70 N (DIN 51 155)		
<b>Adhesion:</b>	min. 7 N/mm² (EN ISO 4624) to grit blasted C-Steel		
<b>Hardness:</b>	70 Shore D (DIN 5305)		

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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<b>Page: 2/2</b>	<b>ATB</b>	<b>Replaces Issue: 01.01.2005</b>