Product Data Sheet

RCC CORROSION CONTROL

COROFLAKE 24LSE VE
Low Surface Energy Vinyl Ester Topcoat

PRODUCT DESCRIPTION
COROFLAKE 24LSE VE is a two-component, **FDA** compliant, Vinyl Ester resin based Topcoat incorporating PTFE fillers. It provides a low surface energy finish layer that exhibits non-stick properties to reduce process deposit build-up or caking of solids on its surface.

COATING LAYERS COMPOSITION
COROFLAKE 24LSE VE is normally applied in one coat at 20-25 mils (500-625 µm) WFT as a final Topcoat over a wide range of compatible vinyl ester lining and coating systems from RCC Corrosion Control. For some specific service conditions, two Topcoat layers may be specified. **COROFLAKE 24LSE VE** is available in standard white and grey color.

FIELDS OF APPLICATION
COROFLAKE 24LSE VE resists a wide range of acids, alkalis and bleach solutions. It is ideal for immersion lining service where reduction of surface deposit build-up or solids caking is desired. The PTFE fillers contribute to the reduction of friction and drag on the surface resulting in ease of cleaning with reduced time and cost. Typical applications include lining in slurry tanks, process tanks and vessels, scrubbers, hoppers and silos. **FDA** compliance enables **COROFLAKE 24LSE VE** application in direct food contact service.

Note: COROFLAKE 24LSE VE is not recommended for application on walking or traffic surfaces.

FEATURES
- Meets compliance requirements of **FDA 21 CFR 175.300** for repeated direct food contact
- Excellent chemical resistance
- PTFE fillers contribute to non-stick finish properties
- Reduces process deposit build-up on the surface
- Easily cleaned to reduce maintenance cost

CHEMICAL RESISTANCE
Information on the chemical resistance properties is available upon request.

SURFACE PRE-TREATMENT
Prior to the application of **COROFLAKE 24LSE VE**, the base lining/coating system application shall have been completed and quality control tested. The surface to receive **COROFLAKE 24LSE VE** must be clean, dry and have not set longer than the recommended recoat interval for the last applied layer of the base lining/coating. The surface can be tested for styrene sensitivity to confirm it is suitable for recoating.

Rub a small area of the base lining/coating surface with a clean rag or finger dampened with Smoothing Liquid F-12 or styrene. If the surface becomes tacky it is deemed styrene sensitive and suitable for recoating. If the surface does not become tacky it must be uniformly prepared for recoating by mechanical abrading or abrasive blasting prior to application of **COROFLAKE 24LSE VE**.

APPLICATION
Refer to Product Information sheets for the application of the primer and base lining or coating system being used. **COROFLAKE 24LSE VE** is applied by airless or conventional spray, by brush or roller.

Application of **COROFLAKE 24LSE VE** should be 20-25 mils (500-625 µm) WFT per coat to achieve 15-20 mils (375-500 µm) DFT.

Application by roller or brush may require additional coats to achieve the total recommended thickness.

Note: During application the surface should be shaded from direct or indirect sunlight whenever possible.

MIX RATIO
Hardener No. 1 Clear is used for the **COROFLAKE 24LSE VE Resin**. The mixing ratio of hardener to resin is 1.5-2.5 oz. per gallon by volume.

The coating components are supplied in premeasured units so that weighing or measuring of the components is kept to a minimum.

CONSUMPTION

Layer	Thickness mils (µm) WFT	Coverage
COROFLAKE 24 LSE VE	20-25 (500-625)	50-70 ft^2/gal

WORKING TIME & RECOAT TIME

Temperature	Working Time	Min Recoat	Max Recoat
50°F (10°C)	approx. 90 min	12 hrs	24 hrs*
70°F (21°C)	approx. 60 min	6 hrs	24 hrs*
90°F (32°C)	approx. 30 min	3 hrs	24 hrs*

* Max interval when applying **COROFLAKE 24LSE VE** over itself

CURE TIME (to place in service)

Temperature	Minimum Cure time
50°F (10°C)	72 hrs
70°F (21°C)	48 hrs
90°F (32°C)	24 hrs

Generally **COROFLAKE 24LSE VE** can be placed in service after the final cure time intervals have been achieved. Consult RCC Corrosion Control for specific recommendations.

Curing for Direct Food Contact Service

Refer to Technical Topic RCC TT-25 Curing and Cleaning of FDA Compliant Vinyl Ester Coatings and Linings.

CLEANING: Cleaning Agent T-100

SAFETY MEASURES

The material safety data sheets of the individual components as well as the legal requirements for handling hazardous materials must be observed.

PACKING UNITS

The products are supplied in the following standard package sizes:

Description	Package Size
COROFLAKE 24LSE VE	1, 4, 25 gal kits

STORAGE

The materials must be stored in a cool and dry place. At storage temperature of 70°F (21°C) the shelf life is as follows:

COROFLAKE 24LSE VE Resin 6 months
Hardener No. 1 Clear 12 months

If the storage time is exceeded, the materials must be tested before use. Higher storage and transport temperatures will reduce the shelf life. The containers must be kept tightly closed. Liquid products must be stored frost-proof.

Technical Data	Testing Standard	Unit	Value
Density - mixed	ASTM D1475	lbs/gal kg/l	9.07 ± 0.25 1.09
Viscosity (Brookfield)	ASTM D2196	cps mPa·s	3100 ± 250
Modulus of Elasticity (Bend Test)	ASTM D790	Psi MPa	360K to 500K 2,500 – 3,500
Tensile Strength	ASTM D638	Psi MPa	2900 20
Linear Coefficient of Thermal Expansion	ASTM C531	in/in°F cm/cm/°C	14-17 x 10^{-6} 25-30 x 10^{-6}
Volatile Organic Compounds	EPA Method 24	g/L (lbs/gal)	151 (1.26)
Maximum Operating Temperature* Immersion-Steel and Concrete (Dependent on the Base Coating or Lining System) Splash/Spill Concrete Continuous Dry		°F °C °F °C °F °C	130-180 54-82 (Typical) 200 93 300 149

***Maximum operating temperature limits may vary depending on actual service conditions**

We warrant that our goods will conform to the description contained in the order and that we have good title to all goods sold. This Product Data Sheet is considered accurate and reliable to the best of our knowledge at the date of its publication, but are used as guides only. The user assumes all risks and liabilities in connection therewith regardless of any suggestion, we may give. We assume no liability for performance of the product or for any loss or damage resulting from its use. Our liability, in law and equity, shall be expressly limited to the replacement of non-conforming goods at our factory, or at our sole discretion, to repayment of the purchase price of the non-conforming goods.