Product Data Sheet

RCC CORROSION CONTROL

COROFLAKE N PRIMER U
Multi-Purpose Vinyl Ester Primer / Saturant

PRODUCT DESCRIPTION
COROFLAKE N PRIMER U is a specially formulated low viscosity, catalyzed Vinyl Ester resin that provides exceptional resistance to rust and undercutting. When applied to concrete the primer will effectively seal and strengthen prepared surfaces to improve the adhesion with subsequent coating, lining and flooring systems.

FIELDS OF APPLICATION
COROFLAKE N PRIMER U can be used as a primer on properly prepared steel or concrete surfaces prior to application of vinyl ester, novolac vinyl ester and polyester resin based coatings, linings and flooring.

COROFLAKE N PRIMER U can also be used as a saturant resin for fiberglass mat, cloth and synthetic fabric reinforcements. Consult RCC Corrosion Control for specific recommendations.

FEATURES
- Excellent adhesion to concrete and steel
- Easy to apply (roll, brush, spray)
- Multi-purpose Primer/Saturant

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

SURFACE PRE-TREATMENT
Carbon steel
For immersion or frequent spillage conditions, abrasive blast to “White Metal” in accordance with SSPC SP-5, NACE Specification #1 or SA 3. For fumes or occasional spill exposure and dry environments, abrasive blast to “Near White” in accordance with SP-10, NACE #2 or SA 2 1/2. A minimum surface profile of 3 mils (75 µm) is required. Refer to specification, RCC TT-14. After blast cleaning the steel surface shall be primed before the formation of any rust bloom.

Concrete
The concrete shall have a minimum compressive strength of 3500 psi (25 N/mm²) and a minimum surface strength of 200 psi (1.4 N/mm²) for coatings and 300 psi (2.1 N/mm²) for linings. The concrete must be thoroughly cured and dry at the time of application. The residual moisture content should not exceed 4%. ASTM D 4263 plastic sheet test method is recommended to ensure concrete is moisture free. If moisture is detected, repeat test until dry.

Abrasive blast or mechanically abrade surface to remove the weak laitance and surface contaminants. Refer to specification, RCC TT-3 for further detail.

APPLICATION
- **COROFLAKE N PRIMER U** is normally applied by brush or roller. Spray application using an airless or conventional air spray system can also be done.
- The primer is generally applied in one uniform coat at 2-5 mils (50-125 µm) WFT.
- Material consumption is greater when applied to concrete substrates due to penetration of the primer into the surface as well as variable surface uniformity. In some applications this can result in an equivalent 5-8 mils (125-200 µm) WFT per coat.

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

MIX RATIO
Hardener No. 1 Clear is added to the **COROFLAKE N PRIMER U Resin**. The mixing ratio is 1.5-2.5 oz. of Hardener per gallon of Resin by volume.

The **COROFLAKE N PRIMER U** components are supplied in premeasured units so that weighing or measuring of the components is kept to a minimum.

CONSUMPTION

Layer	Coverage
COROFLAKE N PRIMER U for steel: Resin and Hardener:	250-300 ft²/gal
COROFLAKE N PRIMER U for concrete: Resin and Hardener:	160-200 ft²/gal

WORKING TIME & RECOAT TIME

Temperature	Working Time	Min Recoat	Max Recoat
50°F (10°C)	approx. 60 min	8 hrs	14 days*
70°F (21°C)	approx. 40 min	4 hrs	14 days*
90°F (32°C)	approx. 20 min	2 hrs	7 days*

* Maximum when area is shaded. If expose to direct or indirect sunlight, maximum recoat is 7 days @ 70°F (21°C).

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 N PRIMER U** can be placed in service after the final cure time intervals are achieved. Shorter or longer intervals may apply depending on service conditions. Consult RCC Corrosion Control for specific recommendations.

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 N PRIMER U	1, 4, 50 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 N PRIMER U 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
Generic Type			Vinyl ester
Density	ASTM D1475	lbs/gal kg/l	8.66 ±0.25 1.04
Viscosity (Brookfield)	ASTM D2196	cps mPa·s	350 ± 50
Tensile Strength	ASTM D638	Psi MPa	2500 17
Adhesion Strength - Concrete	ASTM D7234	psi N/mm²	Exceeds the strength of concrete
Minimum Adhesion Strength – Steel	ASTM D4541	psi N/mm²	1000 7
Volatile Organic Compounds	EPA Method 24	g/L (lbs/gal)	233 (1.94)
Maximum Operating Temperature		°F °C	Dependent on succeeding coating/lining system

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.