

ChemXP™-VE Primer

PRODUCT DESCRIPTION

ChemXP™-VE Primer 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

ChemXP™-VE Primer 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.

FEATURES

- Easy to apply (roll, brush, spray)
- Incorporates FDA compliant resin
- Excellent adhesion to concrete and steel

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 microns) is required. 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.

APPLICATION

ChemXP™-VE Primer is normally applied by brush or roller. Spray application using an airless or conventional air spray system can also be used.

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

MIX RATIO

ChemXP™-VE B is added to the **ChemXP™-VE Primer Resin**. The mixing ratio of hardener to resin is 1.5-2.5 oz per gallon by volume.

The **ChemXP™-VE Primer** components are supplied in premeasured units so that weighing or measuring of the components is kept to a minimum.

CONSUMPTION

Layer	Coverage
ChemXP™-VE Primer for steel: Resin and hardener:	250-300 ft ² /gal
ChemXP™-VE Primer for concrete: Resin and hardener:	160-200 ft ² /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 **ChemXP™-VE Primer** can be placed in service after the final cure time intervals are achieved. Shorter or longer intervals may apply depending on service conditions. Consult Tennant for specific recommendations.

ChemXP™ -VE Primer

CLEANING: Acetone

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
ChemXP™ -VE Primer	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:

ChemXP™ -VE Primer (resin)	6 months
ChemXP™ -VE B	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/mm ²	Exceeds the strength of concrete
Minimum Adhesion Strength – Steel	ASTM D4541	psi N/mm ²	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

All data provided in this Product Information are based on the best of our knowledge and they are to inform generally about our products and their application spectrum. In view of the multitude of possible operating conditions and parameters, the given specifications can only be seen as general information, which do not guarantee special product properties for each particular case. In case of order all essential properties for an individual application should concretely be enquired. On request our Technical Service will furnish a feature profile for such application without undue delay.

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