

PRODUCT INFORMATION

ChemXP™-Nov Primer

PRODUCT DESCRIPTION

ChemXP™-Nov Primer is a two-component, low viscosity primer/saturant based on a high grade Epoxy resin. It will hold abrasive blasted steel surfaces against rusting until protective epoxy or epoxy novolac coatings and linings are applied. The primer will effectively seal and strengthen concrete surfaces to improve the adhesion with subsequent coating, lining and flooring systems.

FIELDS OF APPLICATION

ChemXP™-Nov Primer is generally used as a primer on properly prepared steel and concrete substrates prior to application of epoxy and epoxy novolac floor toppings, linings and coatings.

ChemXP™-Nov Primer is also used as a concrete sealer for light-duty service as well as a basecoat and fiberglass mat saturant resin in specific epoxy based lining/coating system designs from Tennant Coatings.

FEATURES

- Easy to apply (roll, brush, spray)
- Excellent adhesion to concrete and steel
- Low odor

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™-Nov 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 when possible.

MIX RATIO

ChemXP™-Nov Primer B is added to the **ChemXP™-Nov Primer resin**. The mixing ratio of resin to hardener is 2:1 by volume.

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

CONSUMPTION

Layer	Thickness mils (microns)	Coverage
ChemXP™-Nov Primer for steel:	2-5* (50-125)	250-300 ft ² /gal
ChemXP™-Nov Primer for concrete:	2-5* (50-125)	160-200 ft ² /gal
ChemXP™-Nov Primer as a sealer:	5* (125)	140-160 ft ² /gal

*Thickness is based on DFT. Practical coverage on concrete is shown less than steel due to the primer penetrating into the concrete

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

CURE TIME (to place in service)

Temperature	Minimum Cure time
50°F (10°C)	5 days
70°F (21°C)	3 days
90°F (32°C)	2 days

Generally **ChemXP™-Nov Primer** can be placed in service after the following final cure time intervals. Shorter or longer intervals may apply depending on service conditions. Consult Tennant for specific recommendations.

ChemXP™-Nov Primer

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
ChemXP™-Nov Primer	.75, 3, 15, 45 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™-Nov Primer (resin)	24 months
ChemXP™-Nov Primer B	24 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			Epoxy
Density	ASTM D1475	lbs/gal kg/l	9.29±0.25 1.11
Viscosity (Brookfield)	ASTM D2196	cps mPa·s	350 ± 50
Modulus of Elasticity (Bend Test)	ASTM D790	Psi MPa	101,500 – 116,000 700 - 800
Tensile Strength	ASTM D638	Psi MPa	1900 - 2200 13 - 15
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)	45 (0.38)
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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