

PE-CREXT : EXTREME CHEMICAL RESISTANT EPOXY

TECHNICAL DATA SHEET

DESCRIPTION

PE-CREXT is a high-built solvent less two components epoxy novalac coating system designed for severe service coating. It exhibits very good finish and chemical properties. It exhibits very good solvent and chemical resistance. It is suitable for use in direct exposure in manufacturing facilities, warehouses, laboratories, dairies, breweries, chemical plants, paper mills, food processing and pharmaceutical manufacturing.

ADVANTAGES

- Dense surface, resistant to bacteria and moisture and easy to clean
- May apply several layers on itself
- Contains no solvent, allowing for interior application without harmful odors
- Excellent adhesive properties, allowing application on other firm and hard coating, as well as a good bond to the substrate
- Superior chemical and solvent resistance
- Exceptional abrasion resistance

TECHNICAL DATA PROPERTIES @ 73°F (23°C) AND 50% R.H.

PACKAGING	3 US gal (11.35 L) OR 15 US GAL KIT (56.7 L)			
COLOR	Upon Request			
RECOMMENDED THICKNESS	Finish Coat: 16 MILS (100 ft ² /gal)			
SHELF LIFE	12 months in original unopened factory sealed containers. Keep away from extreme cold, heat, or moisture. Keep out of direct sunlight and away from fire hazards.			
MIX RATIO, BY VOLUME	A:B = 2:1			
POT LIFE	30-40 minutes @ 77°F (25°C)			
SOLIDS CONTENT, BY VOLUME	100%			
SOLIDS CONTENT, BY WEIGHT	100%			
THERMAL RESISTANCE	EXPOSURE	PERMANENT	SHORT-TERM MAX. 7 DAYS	SHORT-TERM MAX. 12 HOURS
	DRY HEAT	+ 122°F (50°C)	+ 176°F (80°C)	+ 212°F (100°C)
DENSITY (KG/L)	Part A: 1.29-1.31 Part B: 0.9-1.0			
THINNER RECOMMENDED	Xylene			
VOC (G/L)	320 g/L			

DRYING TIMES	TACK FREE	FOOT TRAFFIC	FULL CURE
	4-6 hours	24 hours	7 days @ 24°C / 50% RH

* Times are approximate and will be affected by changing ambient conditions, especially changes in temperature and relative humidity.

BOND STRENGTH (PSI), ASTM C882 (100 CONCRETE FAILURE)	2640
WATER ABSORPTION, ASTM D570	0.3 %
HARDNESS (SHORE D), ASTM D2240	80-85
FALLING SAND ABRASION RESISTANCE (L SAND/ 1 DRY MIL), ASTM D968	40
VISCOSITY @ 77°F (25°C)	A/B Mix: 3500-4000 cps
TENSILE STRENGTH (PSI), ASTM D638	5700 psi
COMPRESSIVE STRENGTH (PSI), ASTM D695	14200
ELONGATION (%), ASTM D638	3-4

* The indicated mileage is calculated for flat surfaces. A porous or imperfect surface will require more material in order to cover the same mileage. The indicated viscosity is for clear product only. Any addition of colorant may affect the viscosity *

SURFACE PREPARATION

Old concrete

Concrete surface must be cleaned. BLASTRAC, sand blasting, diamond grinder w/30 grit or coarse, or water blasting is highly recommended to remove surface contaminants. Any oils and fats must be removed prior to product application. Acid etching may be required (followed by a thorough rinsing) to open the pores of the concrete to accept a primer. Do not apply to wet substrates. Chloride, moisture, and pH levels should be checked prior to application.

New concrete

The concrete should be allowed to cure for a minimum of 30 days. Compression resistance of concrete must be at least 25 MPa (3625 lb/inch²) after 28 days and traction resistance must be at least 1,5 MPa (218 lb/in²). BLASTRAC, sand blasting, diamond grinder w/30 grit or coarser or acid etching (followed by a thorough rinsing) is required to remove the surface laitance that appeared during the curing process. A primer should be used to reduce out-gassing and promote adhesion.

MIXING

Materials should be pre-conditioned to a minimum of 50°F (10°C) prior to use. Thoroughly mix each component separately. Pour component B into component A using the proper mixing ratio of 2A:1B by volume. Mix both components for at least 1 minute using a drill at low revolution (300 to 450 rpm) to reduce trapping of air. While mixing, scrape bottom and walls of container at least once to ensure a homogeneous mix. Only prepare quantity that may be applied during pot life of mixture.

APPLICATION

Apply mixed product on the prepared surface tightly (thin film) using a rubber rake and pass a roller to obtain a uniform coating. Avoid creating puddles.

CLEANING

Clean all tools and materials with the cleaner/thinner for epoxies. Wash hands and skin carefully with warm soapy water. Once product has hardened, it may only be removed through mechanical means.

RESTRICTIONS

- Minimum/Maximum temperature of substrate: 50°F / 86°F (10°C / 30°C)
- Maximum relative humidity during application and curing: 85 %
- Substrate temperature must be 5.5°F (3°C) above dew point measured
- Humidity content of substrate must be < 4 % when coating is applied
- Do not apply on porous surfaces where a transfer of humidity may occur during application
- Avoid exterior use on substrates at ground level
- Protect from humidity, condensation and contact with water during the 24 hour initial curing period
- Surface may discolor in areas exposed to regular ultraviolet light

CHEMICAL RESISTANCE

TEST GROUP	1 DAY IMMERSION	1 DAY SPILLAGE	3 DAYS IMMERSION	3 DAYS SPILLAGE	7 DAYS IMMERSION	42 DAYS IMMERSION
PETROL CONTAINING MAX. 5 VOL.-% BIO ALCOHOL	A/D	A	A/D	A	A/D	A/D
AIRCRAFT FUEL	A	A	A	A	A/D	A/D
HEATING FUEL / UNUSED ENGINE AND LUBRICATING OILS	A	A	A	A	A	A
ALL HYDROCARBONS CONTAINING MAX. 5 VOL.-% BENZENE, EXCEPT PETROL	A	A	A	A	A	A
CRUDE OIL	A	A	A	A	A	A
ALCOHOLS (MAX. 48 VOL.-% METHANOL), GLYCOL ETHERS	A/D	A	A/D	A	B/D	B/D
ALCOHOLS ≥ C2	A/D	A	A/D	A	A/D	B/D
ALIPHATIC AND AROMATIC HALOGEN HYDROCARBONS ≥ C2	A/D	A	A/D	A	B/D	C
AROMATIC HALOGEN HYDROCARBONS	A/D	A	A/D	A	A/D	C
ALL ESTERS AND KETONES	A/D	A	A/D	A	A/D	B/D
AROMATIC ESTERS AND KETONES	A	A	A/D	A	A/D	A/D
BIODIESEL	A/D	A	A/D	A	A/D	A/D
WATERY SOLUTIONS OF ALIPHATIC ALDEHYDES (UP TO 40%)	A/D	A/D	A/D	A/D	A/D	A/D
ALIPHATIC ALDEHYDES INCLUDING THEIR WATERY SOLUTIONS	A/D	A	A/D	A	C	C
WATERY SOLUTIONS OF ORGANIC ACIDS (CARBON ACIDS) (UP TO 10%) INCLUDING THEIR SALTS	C	A	C	A	C	C
(IN WATERY SOLUTION)	A/D	A/D	C	A/D	C	C
ORGANIC ACIDS (CARBON ACID) INCLUDING THEIR SALTS (IN WATERY SOLUTION) EXCEPT FORMIC ACID	B/D	A/D	C	A/D	C	C
MINERAL ACIDS (UP TO 20 %) AND ACIDIOUS HYDROLYSING SALTS (PH < 6)	A/D	A/D	A/D	A/D	A/D	A/D
ANORGANIC LYES AND ALKALINE HYDROLYSING SALTS (PH > 8)	A	A	A	A	A/D	A/D

A = Resistant B = Limited Resistant C = Not Resistant D = Discolouration a/o loss of gloss (irreversible)

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WATERY SOLUTIONS OF ANORGANIC, NON-OXIDIZING SALTS (PH 6-8)	A	A	A/D	A/D	A/D	A/D
AMINES AND THEIR SALTS (IN WATERY SOLUTION)	A/D	A	A/D	A	A/D	B/D
WATERY SOLUTIONS OF ORGANIC TENSIDES	A	A	A	A	A	B/D
WATERY SOLUTIONS OF ORGANIC TENSIDES	A/D	A	A/D	A	A/D	B/D
ACYCLIC ETHERS	A/D	A	A/D	A	A/D	C
LACTIC ACID 30%	A/D	A/D	A/D	A/D	A/D	B/D
LACTIC ACID 80%	B/D	A/D	B/D	A/D	B/D	C
HYDROCHLORIC ACID HCL 37%	A/D	A/D	A/D	A/D	B/D	B/D
NITRIC ACID HNO₃ 30%	A/D	C	C	C	C	C
NITRIC ACID HNO₃ 40%	C	C	C	C	C	C
SULPHURIC ACID H₂SO₄ 60%	A/D	A/D	A/D	A/D	A/D	A/D
SULPHURIC ACID H₂SO₄ 80%	A/D	A/D	A/D	A/D	A/D	A/D
SULPHURIC ACID H₂SO₄ 96%	A/D	A/D	A/D	A/D	C	C
PHOSPHORIC ACID H₃PO₄ 85%	B/D	B/D	B/D	B/D	B/D	B/D
NA-HYPOCHLORITE 4.4%	A/D	A/D	A/D	A/D	B/D	B/D
ACETONE	A/D	A	A/D	A	C	C
ETHANOL 100%	A/D	A	A/D	A	A/D	A/D
CHROMIC ACID 50%	A/D	A/D	C	A/D	C	C
ACETIC ACID 60%	C	A/D	C	A/D	C	C
ZINC CHLORIDE 50%	A/D	A	A/D	A	A	A
CAUSTIC SODA 50%	A	A	A	A	A	A
AMMONIUM SOLUTION 25%	A/D	A	A/D	A	A/D	A/D
HYDROGEN-PEROXIDE 30%	A/D	C	A/D	C	C	C
N-METHYL-PYRROLIDON	A/D	A/D	A/D	A/D	B/D	B/D
METHYL-METHACRYLATE	A/D	A	A/D	A	A/D	C
DIMETHYL-FORMAMIDE	B/D	A/D	B/D	A/D	C	C
SUGAR SOLUTION SATURATED	A	A	A	A	A/D	A/D

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HEALTH AND SAFETY

In case of skin contact, wash with water and soap. In case of eye contact, immediately rinse with water for at least 15 minutes. Consult with a doctor. For respiratory problems, transport victim to fresh air. Remove contaminated clothes and clean before reuse.

Components A and B contain toxic ingredients. Prolonged contact of this product with the skin is susceptible to provoke an irritation. Avoid eye contact. Contact with may cause serious burns. Avoid breathing vapors release from this product. This product is a strong sensitizer. Wear safety glasses and chemical resistant gloves. A breathing apparatus filtering organic vapors approved by the NIOSH/MSHA is recommended. Predict suitable ventilation.

Consult the material safety data sheet for further information.

IMPORTANT NOTICE

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