FUTURA

itw Futura Coatings

TECHNICAL DATA

Revised Date: 01/2008
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CRL 7000

OXIRANE POLYMER

Product Description

A two component, high solids, ambient temperature cure highly cross linked oxirane polymer. It is extremely resistant to various concentrations of both acid and alkaline solutions and solvents. It has excellent resistance to abrasion, UV, weathering as well as outstanding physical strength and adhesive properties.

Features

- Excellent chemical resistance for long term immersion
- Excellent abrasion resistance
- Excellent weathering and UV resistance
- Resistant to 98% sulfuric acid at ambient temperatures

Recommended Uses

Coating steel and concrete surfaces and other substrates that are exposed to a variety of harsh chemicals. Typically used for chemical processing tanks, vessels, pipes, floors, secondary containment, scrubber systems, ducts, stacks, pickling tanks, acid storage, acid neutralization and clarifiers.

Primers

Steel: SA 200

Concrete: CR 90 / CS2000

Typical Properties

Solids by Volume	90% ± 2
Volatile Organic Compounds	0.9 lb/gal (108g/l)
Theoretical Coverage	1445 ft²/gal @ 1 mil
Recommend DFT	12 - 20 mils
Number of Coats	1 or more
Mix Ratio (by volume)	Mix complete kits only
Shelf Life:	12 months
Operating Temperature	500°F (dry)
Color	Red / Gray

Specification Data

Impact – ASTM D2794	130 in-lbs
Bend – ASTM D522 ¾" mandrel	270°
Adhesion – ASTM D4541	> 2800 psi
Hardness – Barcol – ASTM D2583	> 78
Water Absorption: ASTM D 510 30 days @ 88°F	0.89%
Abrasion Resistance CS17 wheel / 1000 gm / 1000 cycles	4 mg loss

Ordering Information

Packaging:	5 gal kits

APPLICATION INFORMATION
CRL 7000

Surface Preparation

Remove all oil, grease or other contaminants from the surface to be coated in accordance with SSPC-SP 1.

Apply over clean, dry, properly applied recommended primers

Note: For equipment that has been handling sea water or other salt solutions a test for chloride contamination should be performed prior to application. If chlorides are present at 40 ppm or greater the substrate shall be re-cleaned until the chlorides are less than 40 ppm.

Mixing

Power mix the "A" component until a uniform consistency and color is obtained. Make sure that any solids that may have settled have been put back into suspension. Slowly add the "B" component and continue power mixing until a uniform color and consistency is obtained.

Mix complete kits only.

Thinning

Thinning normally not required. If required a maximum of 1 quart (32 oz) of toluol may be added to a 5 gallon pail of the resin.

Pot Life

Material Temperature	Time
75°F (24°C)	1 hour

Application Conditions

	Normal	Minimum	Maximum
Material	75-90°F (24-32°C)	55°F (13°C)	90°F (32°C)
Surface	75-90°F (24-32°C)	55°F (13°C)	90°F (32°C)
Ambient	75-90°F (24-32°C)	55°F (10°C)	90°F (32°C)
Humidity	30-50%	0%	70%

- Surface temperature must be 5°F (3°C) above the dew point.

Clean Up

Use: Acetone, xylene or toluene

Application

Airless:

Pump Ratio	45:1 min	**Tip Size**	.019 - .023"
Material Hose	3/8" ID min 100' max	**Tip Pressure psi**	2500 - 3000

Cure Time

These times are based on a 30-50% RH. Excessive film thickness, cooler temperatures or inadequate ventilation will require longer cure times and could result in premature failure.

	Surface Temperature 75°F
Recoat (min)	8 hours
Recoat (max)	48 hours
Light Service (min)	24 hours
Full cure	9 days

- If the material has exceeded its maximum recoat time or full cure time contact ITW Futura Coatings for recommended recoating procedures.
- Curing can be accelerated by using heat after the coating has been allowed to harden under ambient conditions. At 150°F material will cure in 16 hours.
- Holiday testing per NACE RP0199-98 should be conducted for all coatings going into immersion service. Use a setting of 100 volts/mil. All pinholes must be marked and repaired.

Safety Information

- Read the Material Safety Data Sheet (MSDS) and container labels for detailed health and safety information.
- Do not apply material in enclosed areas without adequate air exchange and ventilation.
- All application personnel must use respirators rated for organic vapors, or in confined spaces wear fresh air respirators or fresh air hoods.
- Wear protective clothing, gloves and eye protection.
- Breathing fumes or contact with the skin may cause severe allergic reactions.
- **This product is intended for industrial use by properly trained professional applicators only.**

Storage Conditions

- Coatings need to be protected from moisture contamination. Store drums and pails in a dry location at 55-90°F (13-32°C).
- Materials **must** be kept above 55°F (13°C).

ITW FUTURA COATINGS, 1685 GALT INDUSTRIAL BLVD., ST LOUIS, MO, (314) 733-1110