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## POLYSURF CHEMRZ 6031 Solvent-Free Novolac Chemical Resistant Liner and Coating

### Product Description:

PolySurf CHEMRX 6031 is a multifunctional phenol novolac resin that is extremely chemical resistant with a high heat deflection temperature. PolySurf CHEMRX 6031 is a thick film novolac lining designed to cure at ambient temperature to provide exceptional corrosion protection for surfaces in severe chemical and physical environments

### Features:

- Heavy-Duty Chemical Resistant Protective Lining
- Corrosion Protection
- Abrasion Resistant
- Extremely Hard and Tough

### Typical Floor Uses:

- Crude and Storage Tanks
- Containment Wall and Floors
- Petrochemical Plants
- Power Generating Plants
- Food Processing Facilities
- Internal Tank and Pipe Lining Systems
- Water and Wastewater Treatment Plants
- Mining and Milling Industries
- Pulp and Paper Industry

PolySurf CHEMRX 6031 will provide a high degree of protection against corrosive moisture, fumes, carbon dioxide, hydrogen sulfide, methane gases, industrial water and wastewater solutions containing salts, detergents, many acids, alkalis, and other chemicals. PolySurf CHEMRX 6031 is used as a heavy-duty chemical resistant protective lining.

PolySurf CHEMRX 6031 is also resistant to petroleum products such as kerosene, diesel, gasoline, aviation fuels, motor oils, lubrication materials, greases, hydraulic fluids, alcohols, aliphatic and aromatic hydrocarbon solvents.

### COLORS:

Grey with High Gloss. Finish may vary due to texture and porosity of substrate. Chalking will occur with extended exposure to sunlight. Subject to color change.

### PACKAGING

1 Gallon Kit: One 1 gallon can (net 0.75 gal) of Side-A and one 1 quart can (net 0.25 gal) of Side-B.

4 Gallon Kit: One 5 gallon pail (net 3 gal) of Side-A and one 1 gallon can (net 1 gal) of Side-B.

Contact U.S. Polymer Surfaces for product availability.

## POLYSURF CHEMRZ 6031 Product Data Sheet

### Technical Data (Based on draw down film)

Mix Ratio by Volume	3A : 1B
Solids Content	100%
Pot Life at 75°F (24°C), 50% R.H.	30-45 min.
Dry Film Thickness per Coat	5 ± 1 mil (127 ± 25 microns)
Hardness, ASTM D-2240	80 ± 5 Shore D
Specific Gravity, Part-A.....	1.17
Part-B.....	1.50
Total Solids by Weight, ASTM D-2369	100%
Total Solids by Volume, ASTM D-2697	100%
Volatile Organic Compounds, ASTM D-2369-81	0 lb/gal (0 gm/liter)

### Mixing:

The volume mixing ratio: 3A : 1B. PolySurf CHEMRX 6031 may not be diluted under any circumstances. Add PolySurf CHEMRX 6031 Side-A into Side-B. Power stir product until completely mixed and uniform color appears, approximately 2-3 minutes.

### Coverage:

PolySurf CHEMRX 6031 may be applied at any rate to achieve desired thickness. Theoretical coverage per gallon is 1600 sq. ft. at 1 mil.

### Surface Preparation:

In general, coating performance is directly proportional to surface preparation. All surfaces must be clean, dry and free of oil, grease, wax, dirt, chalk, salts and other contaminants. Round off sharp edges and rough welds. Burrs and weld spatter should be completely removed.

**Carbon Steel:** Use SSSP Guidelines for surface preparation. Metal surfaces should have an anchor profile of 3 mils (0.003) or more. If metal substrate has "cavities" or "indentations" apply primer application coat and back roll to completely wet and thoroughly penetrate surface to ensure all voids and irregularities are filled.

**For Internal Linings:** Abrasive blast to SSSP-SP-5 (White metal) to achieve a surface anchor profile of 22-3 mils.

**For Exterior Use:** Abrasive blast to SSSP-SP-10 (Near white) to achieve a surface anchor profile of 12-2 mils.

After abrasive blasting, remove all dust or other contaminants by vacuum or dry air blow-down. Abrasive blasted metal surfaces must be primed as soon as possible, do not allow to remain overnight. If flash rusting occurs it must be removed.

**Concrete and Masonry:** Concrete and masonry to cure at least 28 days. Surface and substrate must be dry and clean. Clean and open surfaces by dry abrasive "brush-off" blast. All concrete laitance should be removed. "Blow" holes and cavities should be opened in order to properly fill and seal. Level protrusions and repair cavities, voids, and

cracks. Apply primer application coat and back roll to completely wet and thoroughly penetrate surface to ensure that all irregularities are filled and sealed.

Remove all contaminants and deteriorated concrete. Brush blast to achieve roughed surface sufficient to remove laitance or surface hard-face. Vacuum all concrete surface prior to application of primer. All cracks, rock pockets and voids must be filled with non-shrink grout, and sanded. Concrete must be free of puddled water or moisture.

#### **APPLICATION**

Applied over: Carbon steel, or concrete.

##### Surface Preparation Method:

Carbon Steel: SSSP-SP-10, 5 or SP-12 (WJ-4)

Application temperature for PolySurf CHEMRX 6031 should be between 50-110°F (air and surfaces). Do not apply product unless temperature is at least 5° above the dewpoint. Recoat schedule is 2-8 hours at 70°F and dependent upon environment. See Specification Guide for re-coating guidelines and additional information.

Airless: Use Graco 68:1 pump or higher, 206-718 gun with fluid tip of .019" or larger orifice size with Reverse-A-Clean tip, 3/8" I.D. or larger high-pressure solvent resistant fluid line, 1/2" I.D. or larger air supply line. Continuous air source capable of 80 to 100 psi inbound pressure at pump. Equipment of equal performance is acceptable.

Conventional Spray: Variations of conventional production spray equipment such as pressure pot, air assisted airless or high volume, low pressure systems as supplied by Binks, Graco, Nordson, Devilbiss or equal may be used.

Brush / Roller: Use solvent resistant short hair or natural bristle brush. Roller - use short nap synthetic covers for back rolling or ribbed metal roller.

#### **EQUIPMENT CLEANUP**

Equipment should be cleaned with an environmentally safe solvent, as permitted under local regulations, immediately after use.

#### **STORAGE**

PolySurf CHEMRX 6031 has a shelf life of one (1) year from date of manufacture in original, factory-sealed containers when stored indoors at a temperature between 60-95°F (15-35°C). Avoid freezing temperatures. Store drums on wooden pallets to avoid direct contact with the ground.

#### **LIMITATIONS**

The uncured materials used in PolySurf CHEMRX 6031 are very sensitive to heat and moisture. Higher temperature and/or high humidity will accelerate the cure time. Use caution in batch sizes and thickness of application. Low temperature and/or low humidity extends the cure time and the use of accelerators may be necessary.

Inspect the installed work of other trades and verify that all such work is complete so that PolySurf CHEMRX 6031 may be installed. All surfaces to receive PolySurf CHEMRX 6031 must meet all applicable building and safety codes in the prescribed city, county or state, whichever has jurisdiction. The substrate must be structurally sound and sloped for proper drainage. No liability is assumed by U.S. Polymer Surfaces for substrate defects and for improper surface preparation and application.

PolySurf CHEMRX 6031 must cure at least 24 hours at 75°F (24°C) and 50% relative humidity before any immersion services. Cure time may be longer at lower temperature. Do not open until ready to use. No liability is assumed U.S. Polymer Surfaces for substrate defects and/or improper substrate preparation and application.

##### **Limited Warranty:**

*Please read all information in the general guidelines, product data sheets, guide specifications and material safety data sheets (MSDS) before applying material. Published technical data and instructions are subject to change without notice. Contact your local U.S. Polymer Surfaces International representative or visit our website for current technical data and instructions.*

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##### **Disclaimer:**

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