

POLAPRIME DTM™

Polyurethane Direct-To-Metal Primer



DESCRIPTION

POLAPRIME DTM is an aquaborne polyurethane primer that is highly effective as an adhesion promoter to metal surfaces. It is effective over ferrous and non-ferrous metals, together with many plastics and mineral composites. Polaprime DTM wets out the surface efficiently and penetrates pinholes and crevices to stabilize the surface and improve adhesion. The protection that Polaprime DTM provides at the adhesion interface between the coating and the substrate prevents interstitial creep and maintains a stain resistant barrier.

OUTSTANDING FEATURES

- High-strength adhesion to both ferrous and non-ferrous metals, including steel, tin, aluminum, zinc, and copper.
- Seals and protects corroded metals and stabilizes rust.
- Sets rapidly to allow early over-coating.
- Forms a tough, scrape-resistant finish that allows a long re-coat window.
- Low odor and non-flammable.
- Contains no toxic ingredients or heavy metals.
- Tools and equipment may be cleaned with water while wet.
- May be applied by brush, roller or spray.

- Compatible with water-based or solvent-based topcoats.

APPLICATION

CAUTION! Read this entire data sheet before continuing.

Surfaces must be free from dirt, loose debris, oil, grease, or other substances that would interfere with proper contact with the surface. Smooth, glossy surfaces should be roughened, scratched, or abraded to a dull matt appearance. Although some dampness is tolerable, the surface should be substantially dry, and dewpoint must be 5° below application temperature. Weld splatter, burrs, and sharp edges should be ground away. Stir thoroughly for 3 minutes, then keep the container covered whenever possible to prevent contamination.

Apply by spray, roller, or brush.

Airless spray equipment should be capable of 2,000 psi tip pressure. Tip size should be in the range of 0.017 to 0.021. Roller nap should be low to medium (1/4" to 3/8" nap). Chip brushes are adequate to achieve good transfer. Use only enough Polaprime DTM to wet out the surface and to penetrate cracks, pinholes, etc. Spread out and remove runs and pools before they dry.

As soon as the Polaprime DTM has dried to the point that it cannot be scratched off by thumbnail or wooden stick, it may be coated. This will take around 30 minutes to 2 hours, depending upon surface temperature and relative humidity. Although it is best to apply coating to the primer as soon as it has adequately dried, Polaprime DTM may be coated after many days following application. If dirt and debris has collected on the surface, this

SPECIFICATIONS	
Chemistry	Water-Borne Polyurethane
VOC	Below 200 gms/liter
Viscosity	70 Kres Units
Shelf Life	1 year (unopened) from date of manufacture
Pounds Per Gallon	10.1
Coverage	Approximately 400 sq. ft. per gallon, depending on substrate
Packaging	Available in 1 gallon and 5 gallon pails
Color	Orange
Storage	Between 50° F and 90° F. Do not allow to freeze.

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must be removed before coating. If the surface becomes contaminated with any substance that could interfere with adhesion or cause staining, then thorough cleaning and re-priming will be necessary.

LIMITATIONS

Do not apply Polaprime DTM if the temperature is predicted to drop below 45°F within 2 hours of completion of application. Do not apply if rain is forecast within 4 hours of application.

MAINTENANCE

If an area becomes damaged, scrape away and remove any loose material and scuff or abrade adjacent undamaged surface. Clean thoroughly and remove any contaminants, then re-prime and re-coat according to the directions of the relevant technical data sheets. The repaired area should be extended to tie-in with the (scuffed and abraded) surrounding surface.

PRECAUTIONS

Read the container label warnings and the Safety Data Sheet (SDS) for important health, safety, and environmental information prior to the use of this product. Keep out of reach of children and pets. This is an industrial product, designed for use by professional coating applicators.

For more information, call our Technical Department.

TECHNICAL DATA		
Viscosity:	70	ASTM D-562
Pounds Per Gallon:	10.1	ASTM D-1475
Flashpoint:	Non-Flammable	ASTM D-3278
Solids Content:	45% B.W.; 38% B.V.	ASTM D-2369
Adhesion to Aluminum:	5 B	ASTM D-3359
Adhesion to Steel:	5 B	ASTM D-3359
Adhesion to Tin:	4 B	ASTM D-3359
Adhesion to Lead:	5 B	ASTM D-3359
Drying Time (70°F, 70% R.H.):	90 minutes	ASTM D-1640
Hardness:	2 H	ASTM D-3363
Sward Hardness:	44	ASTM D-2134
Tensile Strength:	4,300 psi	ASTM D-882
Elongation:	300%	ASTM D-882
Water Immersion:	1,000 Hours	ASTM D-870
Wet Film Thickness:	4 Mils	ASTM D-1212
Dry Film Thickness:	2 Mils	ASTM D-1005
Odor during Drying:	Low Odor	ASTM D-6165

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Effective Date: 1/2017

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