

# POLYPRIME-100<sup>™</sup>

PRIMER

Revised 12.03.12

## **DESCRIPTION**

POLYPRIME-100™ is a two-component 100% solids primer with excellent wet-out properties for deep penetration. POLYPRIME-100™ may be top coated or used as a standalone rust corrosion inhibitor.

POLYPRIME-100™ component "A" (Modified diphenylemthane diisocyanate) is a brown colored liquid that has been chemically modified to be readily emulsifiable in water without the addition of surface active agents.

POLYPRIME-100™ component "B", is a clear glyceryl triester that will crosslink with the "A" component and enhance the chemical bond to the SPI polyurea topcoat.

POLYPRIME-100™ is typically mixed as a 50/50 ratio. However, if the substrate has a high moisture content the "A" component can be increased to a 60% "A" / 40% B" mix.

POLYPRIME- $100^{\text{TM}}$  is NSF/ANSI 61 approved for potable water.

## **COLOR**

Cured material is amber, translucent. Finish is semi-gloss.

# SURFACE PREPARATION FOR CONCRETE

Remove dust, dirt, oil, latent, curing compounds, concrete sealer, etc. from surface by power wash, acid etch, grit blast, or profiling equipment. The prepared concrete surface is to be clean, dry, hard/dense, free of cracks and holes with a slightly roughened surface. For application on new concrete, refer to Specialty Products, Inc.'s Concrete Surface Preparation Guide.

Contact a SPI representative for surface preparation guideline publications.

<u>Note:</u> If "bug holes" or "capillaries" are present on the surface, an approved grout or filler may be used to minimize out-gassing, and the resultant "craters" in the SPI polyruea topcoat.

## **APPLICATION**

**Mixing Instructions:** Mix equal amounts of POLYPRIME-100™ "A" component with POLYPRIME-100™ "B" component for approximately 2 minutes. A cloudy liquid will result.

**Note:** Do not add new material to previously activated primer. Do not mix more than what can be used within the pot life.

- Brush or roll on primer then squeegee for a thin, even coat.
- If POLYPRIME-100<sup>™</sup> is sprayed through 1:1 ratio, heated equipment, set primary and hose heat as 110°F – 130°F. Back roll to work primer into substrate.
- Use DPM, NMP, or Polyclean for clean up of equipment.

WET PROPERTIES			
Solids by Volume	100%		
Recommended Spread Rate	Wet mils	3 – 8 mils	
@ approx 200 – 500 sq. ft. per gallon (18.5 – 46.5 m <sup>2</sup> per gallon)	Dry mils	3 – 8 mils	
Mix Ratio* by Volume	Normally 1:1 by volume		
Flash Point	>200°F (93°C)		
Weight per gallon (mixed)	8.8 lbs (4kg)		
MVT (ASTM E96 – 80 perms)	8.8 lbs (4 kg)		
Shelf Life Unopened Containers @ 77°F (25°C)	6 months		

\*If the substrate has a high moisture content, component "A" can be increased to a 60% "A" / 40% "B" mix.

NOTE: If the maximum recoat time is exceeded, brush blast or deglaze with other abrasion methods and wipe with SPI Prep Wipe™ before recoating.

CURING SCHEDULE		
Tack Free (to touch)	4 – 6 hours @77°F (25°C) 60% R.H.	
Topcoat	6 – 10 hours	
Pot Life*	10 – 15 min @ 77°F (25°C) 60% R.H. (unreduced)	
Maximum	Within 8 hours following tack free @ 70°F	

\*Pot life in the container will be decreased (due to exothermic heat) when large quantities are mixed.

# RECOMMENDED EQUIPMENT AND SETTINGS

- Standard 1:1 ratio, heated, plural-component equipment developing a minimum of 1500psi (10.4 mpa) dynamic pressure with heating capabilities to 175° F (79°C) will adequately spray Polyprime-100™. These include Graco 20/35, 20/35 Pro, H-2000, H-3500, HV-20/35, Reactor A-20, E-20, E-30, E-XP1, E-XP2, H-25, H-40, H-XP2, H-XP3, SPI 18/18, and SPI Gusmer 25/25, with a Fusion MP, Gap Pro, Glass Craft P2, P2 Elite, P2 Elite "C", P3, Gusmer D-7, GX-8 Pro, and SPI D-7 gun.
- Pre-heater temperature should be at 110°F 130°F (43°C 54°C).
- Hose temperature should be at 110°F 130°F (43°C 54°C).
  A hose thermometer inserted under the insulation near the gun should read a minimum of 90°F 110°F (32°C 43°C).
- A SPI static mix adapter with airless tip is recommended to enhance physical properties.

# **GENERAL SAFETY, TOXICITY & HEALTH DATA**

Material Safety Data Sheets are available for this coating material. Any individual who may come in contact with these products should read and understand the M.S.D.S. **CHEMTREC EMERGENCY NUMBER 1-800-424-9300** 

**WARNING:** Contact with skin or inhalation of vapors may cause an allergic reaction. Avoid eye contact of the liquid or spray mist.

CLEAN UP: Use DPM, NMP, Polyclean.

**EYE PROTECTION:** Safety glasses, goggles, or a face shield are recommended.

**SKIN PROTECTION:** Chemical resistant gloves are recommended. Cover as much of the exposed skin area as possible with appropriate clothing

**INGESTION:** Do not take internally. It is believed ingestion of polymeric isocyanates would not be fatal to humans, but may cause inflammation of mouth and stomach tissue.

**RESPIRATORY PROTECTION:** Use a respirator approved for isocyanates and organic vapors. If you are not sure or not able to monitor levels, or if you are spraying in an enclosed/indoor area, use MSHA/NIOSH approved supplied air respirator. Consider the application and environmental concentrations in deciding if additional protective measures are necessary.

## OTHER INFORMATION AVAILABLE

Material Safety Data Sheet (MSDS) Wet Concrete Primer Study Concrete Surface Preparation Guide

#### WARNING

Polymeric products manufactured from these chemicals may present a fire hazard if improperly used. Each user of such products should determine whether there is potential hazard in a specific application and take the necessary precautions.

#### **LIMITATIONS**

- This product is for professional use only.
- Minimum material/container temperature for application is 70°F (21 °C).
- Avoid moisture contamination in containers. Containers should not be resealed if contamination is suspected, CO<sub>2</sub> created pressure can develop. Do not attempt to use contaminated material.
- Undried air exposed to liquid components will reduce physical properties of the cured coating.

**Note:** The material supplied is two components (Component "A"/Component "B") used to formulate this product. The quality and characteristics of the finished polymer is determined by the mixture and application of the two components.

# WARRANTY

Specialty Products, Inc. has no role in the manufacture of the finished polymer other than to supply its two components. It is vital that the person applying this product understands the product and is fully trained and certified in the use of plural-component equipment.

Specialty Products, Inc., an Alaska corporation, warrants only that the two components of this product shall conform to the technical specifications published in the product literature.

The quality and fitness of the product are dependent upon the proper mixture and application of the components by the applicator. There are no warranties that extend beyond the description on the face of this instrument.

SPECIALTY PRODUCTS, INC. MAKES NO WARRANTY OF MERCHANTABILITY OF THE PRODUCT OR OF FITNESS OF THE PRODUCT FOR ANY PARTICULAR PURPOSE.

Specialty Products, Inc. makes no warranty as to the quality of any product modified, supplemented, tinted, or altered in any way after it leaves the manufacturing plant. Specialty Products, Inc. does not warrant that this product is suitable for use as a liner for potable water containers. Use of this product in a potable water container could be hazardous to health if it is improperly processed or applied.

The <u>liability of Specialty Products</u>, <u>Inc.</u> for any nonconformity of the product to its technical specifications <u>shall</u> be <u>limited to replacement of the product</u>.

The sole exclusive remedy of buyer, which is to have Specialty Products, Inc. replace any nonconforming product at no cost to buyer, is conditioned upon buyer notifying Specialty Products, Inc. or its distributor in writing of such defect within thirty days of the discovery of such defect.

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The data presented herein is intended for professional applicators or those persons who purchase or utilize this product in the normal course of their business

The potential user must perform any pertinent tests in order to determine the product's performance and suitability in the intended application, since final determination of fitness of the product for any particular use is the responsibility of the buyer.

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Product & Equipment Technical Assistance 24 hours – 7 days a week (800) 627-0773

