

# **PERLASTIC®**

# **ROLLER/BRUSH-APPLIED PROTECTIVE LINING**

# TECHNICAL DATA

WWW.POLYMERS-ONLINE.COM

1-800-933-1031

#### PRODUCT DESCRIPTION

Perlastic® products are a family of corrosion protection products for industrial applications. The chemically resistant asphalt-based formula provides excellent barrier properties to withstand many of the aggressive chemistries found on industrial sites.

Perlastic Roller Grade (RG) is a thick, brushable air cured coating used alone or in conjunction with Perlastic Spray Grade material. Perlastic RG is best used alone where corrosion protection is a requirement and spraying is not practical due to access and/or size of application. Perlastic RG is commonly used as a companion product to Perlastic SG. In many applications, RG can be used for "striping" corners and edges prior to spraying the SG material.

Perlastic products are safe and environmentally friendly since they are water-based and contain no volatile organic chemicals (VOCs). Perlastic products are also economical since they can be painted directly over cleansed mild rust, which reduces labor costs and eliminates the risks to health and safety with surface preparation techniques such as sand blasting.

Perlastic RG is specially formulated as a corrosion protection barrier for use on:

- Structural steel
- Steel and concrete tanks and related structures
- Concrete secondary containment structures
- Mechanical equipment and conveyors
- Steel and concrete pipes and related structures

#### **LIMITATIONS**

Perlastic should not be used as an exposed wearing surface. Do not apply to contaminated surfaces. Substrate temperature should be above 40°F (18°C). Do not apply when ambient temperatures are expected to be below freezing within 48 hours. Properly ventilate. Cure rates are extended in high humidity conditions. Check with Global Polymer Solutions for direct exposure to chemicals for compatibility. Not recommended for contact with petroleum based products. Do not allow material to freeze prior to application.

# **PACKAGING**

Perlastic RG comes in 5 gallon containers.

#### INSTALLATION

Perlastic RG can be applied directly to a prepared but rusted surface and even to previously coated areas. If applying over previously painted surfaces, an adhesion test is suggested to check for good adhesion.

Where gaps greater than 1/8" inch, it is common to use a "three coursing" method to close the gaps. This method consists of reinforcing fabric (such as Tietex 272 polyester) to bridge the gaps, applying the RG over the tape 2 inches beyond the fabric, then spraying the SG. Please refer to our technical procedures at www.cetco.com/cps for more discussion.

Equipment: Perlastic RG can be applied with any paint brush. For rolling, use 1/8th inch nap disposable roller.

# **INSTALLATION**

**Surface Preparation:** Perlastic can be applied to most substrates. New metal should be washed with a degreaser to remove any oils, then profiled with a wire wheel or grinder. Rusted steel should be pressure washed at 3000 psi or greater. Concrete should be power washed at 3000 psi or greater. Remove any grease/ oil stains with degreaser, rinse with water, and allow to dry. Horizontal surfaces should be sealed with a concrete sealer, call for recommended products. No sealer is needed for vertical applications.

**Coverage:** The product will build to 25 wet mils thickness in one application, generating 15 mils dry film thickness. If more thickness is desired, additional applications will be necessary. If applying multiple coats, waiting until initial coat turns from brown to black is recommended.

PERLASTIC* RG MECHANICAL & PHYSICAL PROPERTIES			
MECHANICAL PROPERTY	TEST METHOD	TYPICAL RESULT	
Tensile Stress @ Break	ASTM D412	89.5 PSI	
Tensile Elongation @ Break	ASTM D412	270%	
Elastic Recovery %	ASTM D412-mod	70%	
Tear Strength Max	ASTM D624	1.92 (lbf)	
Shore A Durometer Testing	ASTM D2240	48	
Puncture Deflection	ASTM E154	7.3 inches	
Pull-Off Adhesion Strength to Galvanized Steel	ASTM D4541	107 PSI	

PHYSICAL PROPERTY	TEST METHOD	TYPICAL RESULT
Color	Internal Method	Dark Brown
pH	Internal Method	10-12
Odor	Internal Method	Minimal
Fluid Density	ASTM D70	1.01 g/ml
Wt/Gallon	ASTM D6937	8.5 lbs/gal
Specific Gravity @ Full Cure	ASTM D792	1.08
Percent Solids	ASTM D2939	~60%
Brookfield Viscosity @ 20 RPM (Typical)	ASTM D2196	8,000 cPs

PERLASTIC* RG COVERAGE APPLICATION			
COVERAGE	TEST METHOD	TYPICAL RESULT	
Dry Time at 70°F	Set to Touch	2 hrs	
	Tack Free	4 hrs	
	Full Cure (In Service)	48 hrs	
Coverage @ 60 mils (DFT)	Internal Method	15 ft²/gal	

PERLASTIC* RG STORAGE			
STORAGE	TEST METHOD	TYPICAL RESULT	
Shelf Life in Air Tight Container	Internal Method	6 months	
Minimum Storage Temperature	Internal Method	45°F	

PERLASTIC® RG EXPOSURE TESTING			
EXPOSURE	TEST METHOD	TYPICAL RESULT	
Salt Spray Testing (1344 hrs)	ASTM B117	Pass	
Rust Creep Testing (1344 hrs)	ASTM D1654	Pass	
Direct Flame Test	ASTM D2939	0 sec	

### **WARRANTY**

GLOBAL POLYMER SOLUTIONS warrants this product to be free of defects in material and workmanship. GLOBAL POLYMER SOLUTIONS's sole obligation and Buyer's exclusive remedy in connection with the products shall be limited, at GLOBAL POLYMER SOLUTIONS's option, to either replace the products not conforming to this Warranty or credit to Buyer's account in the invoiced amount of the nonconforming products. Any claim under this Warranty must be made by the Buyer to GLOBAL POLYMER SOLUTIONS in writing within (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life, or one year from the delivery date, whichever is earlier. Buyer's failure to notify GLOBAL POLYMER SOLUTIONS of such nonconformance as required herein shall bar Buyer from recovery under this Warranty.

GLOBAL POLYMER SOLUTIONS makes no other warranties whether express, implied, or statutory, such as warranties of merchantability or fitness for a particular purpose, shall apply. In no event shall GLOBAL POLYMER SOLUTIONS be liable for consequential or incidental damages.

Any recommendations or suggestion relating to the use of the products made by GLOBAL POLYMER SOLUTIONS, whether in its technical literature, or in response to specific inquiry, or otherwise, is based on data believed to be reliable; however, the products and information are intended for use by buyers having requisite skill and know-how in the industry, and therefore it is for Buyer to satisfy itself of the suitability of the products for its own particular use and it shall be deemed that Buyer has done so, at its sole discretion and risk. Variation in environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results.

#### **LIMITATION OF LIABILITY**

GLOBAL POLYMER SOLUTIONS's liability on any claim of any kind, including claims based upon GLOBAL POLYMER SOLUTIONS's negligence or strict liability, for any loss or damage arising out of, connected with, or resulting from the use of the products, shall in no case exceed the purchase price allocable to the products or part thereof which gives rise to the claim. In no event shall GLOBAL POLYMER SOLUTIONS be liable for consequential or incidental damages.