

HIGH BUILD EPOXY

DESCRIPTION

Poly-rock 448 Series is a two-component high build modified Polyamine epoxy. It can be used as a high-performance primer in immersion and for the following applications: properly prepared steel, intermediate coat, for field or for shop applications. It can also be used for roughened galvanized or roughened stainless steel surface.

FEATURES

- No induction time
- High film build 10 - 15 mils D.F.T (250 - 375 microns)
- Excellent adhesion to blasted steel or concrete
- Excellent adhesion to tightly adhered rust
- Fresh and salt water resistant
- Can be recoated with itself
- Excellent chemical resistance: resists splash and spillage of alkalis, greases, salts and oil
- For long term color and gloss retention use aliphatic polyurethane topcoat 8000 series
- Excellent corrosion resistance
- Surface tolerant

RECOMMENDED USES

- Bridges and high-performance architecture
- Piping and tanks
- Pulp and paper mills
- Chemical plants and refineries
- Water and wastewater treatment facilities
- Mining and fertilizer plants

TECHNICAL DATA

Colors available:	448005 Grey	Drying times:	
	448011 Aluminum	Dust Free:	6 hours
	448102 Cream	To recoat:	4 hours
	448701 Red Oxide	Hard:	16 hours
	448906 Black	Induction time:	No induction
Gloss:	15 - 40°	Reduction solvent:	111629
Temperature Resistance		Dilution:	10 % by volume (if necessary)
Continuous Dry:	121°C (250°F)	Catalyst:	918604
* Solids by volume:	76 % +/- 2 %	Ratio:	4:1
* Solids by Weight:	89 % +/- 2 %	Pot Life:	4 hours after mixing at 25°C (77°F). Higher temperature will shorten pot life.
Dry film thickness microns:	250 - 375	Shelf life:	24 months @ 25°C (77°F) unopened 3.02 litres (0.80 US quarts)
Viscosity:	80 - 100 ku	Packaging:	15.14 litres (4 U.S gallons)
Specific gravity:	1.77 - 1.95 kg/ltr		
Flash Point:	16°C (60.8°F)		
V.O.C.:	200 grams/litre 1.67 lbs. / US gal.		
Immerse:	7 days		
		* Data may vary according to color	

Revised 3/11/2013

HIGH BUILD EPOXY

APPLICATION GUIDE

SURFACE PREPARATION:

Remove all grease, oil, salt and dirt in accordance with SSPC – SP – 1 “solvent cleaning” with Polyur 101628 (water-based) or Polyur 101601 (solvent based) or approved equivalency. Remove any loose paint. **For new and existing steel surfaces:** direct to metal coatings achieve maximum performance over near white blasted surfaces in accordance with SSPC – SP – 10. The minimum surface preparation for non – immersion service is SSPC – SP – 6 and for immersion service the minimum standard is SSPC – SP – 10. If the surface remains very rusty use one component moisture cure polyurethane primer sealer. **For galvanized, stainless steel or aluminum:** Abrade the surface equal to a 120 grit sand paper. Clean the surface with Polyur 101628 or 101601 before the application.

MIXING AND THINNING:

First, power mix the base portion until it becomes homogenous. Secondly, add the hardener slowly with continued agitation until the two components are homogeneously mixed together. After this process, the system is ready for immediate use.

Reduction solvent: 111629 (10 % by volume if necessary) **Catalyst:** 918604
Dilution: Not required **Mixing ratio:** 4:1

APPLICATION PROCESS

* RECOATING TIME

Substrate temperature	Dust free dry	Hard	Minimum	Maximum	Normal
10°C – 20°C (50°F - 68°F)	8 – 12 hours	24 – 32 hours	8 hours	2 months*	8 hours
20°C – 35°C (69°F - 95°F)	4 – 6 hours	12 – 16 hours	4 hours	2 months*	4 hours

* Dirt, contaminants or chalking may occur within this time period. Before top coating remove oil, grease, dirt contaminants or chalking per “SSPC – SP - 1 solvent cleaning.” Consult SSPC (Publication) Good Practice. Ventilation, solvent evaporation, humidity, film thickness, thinning and other conditions can influence the rate of drying time.

Brush and roller: For small surfaces only. Use clean synthetic roller ¼ inch to ½ inch nap.

CONVENTIONAL SPRAY		AIRLESS SPRAY	
Manual Spray gun:	DeVilbiss JGA-510, MBC-510 or equivalent	Pump Ratio:	30:1
Fluid Nozzle:	E Fluid Tip	Pressure:	2800 Psi minimum
Air Cap:	704 or 765	Hose:	¾ inch, 50 ft. length maximum
Atomizing Air:	45 – 75 lbs	Tip Size:	0.019 – 0.021
Fluid Pressure:	15 – 20 lbs	Filter Size:	50 Mesh (300 um)
Hose:	½ inch, 50 ft length maximum		

PRODUCT LIMITATIONS

- Thinner can be added depending on local V.O.C. and air quality regulations
- Chalking occurs under ultraviolet conditions.
- Minimum curing temperatures limited to 5°C (41°F)
- Concrete should be hardened for 28 days before application

DISCLAIMER:

"The following is made in lieu of all warranties, expressed or implied: Manufacturer's obligation shall be to replace such quantity of the product proven to be defective. The manufacturer shall not be liable for any injury, loss or damage, direct or incidental or consequential, arising out of the use of or the inability to use the product. Before using, the user shall determine the suitability of the product for the intended use and the user assumes all risk and liability whatsoever in connection therewith. All values shown are approximations. Values indicated are for guide purposes only, as actual values can change due to application conditions, application methods, environmental conditions etc. The information contained herein is subject to change without notice. Consult your representative for a current data sheet. The foregoing may not be altered except by an agreement signed by the officers of the manufacturer." © Polyval Coatings Inc. Poly-Rock and Polyval are registered trademarks of Polyval Coatings Inc. All Rights Reserved.

Keep in cool and dry area. See the material safety data sheet and product label for complete safety and precaution requirements.

Chemical resistance information is currently being updated according to ASTM standards. Please contact your local representative for an update.