

SELECTION & SPECIFICATION DATA

Generic Type	High solids polyamine-epoxy
Description	Polyclad 951 flowliner is an epoxy lining for "dry" natural gas transmission pipelines. It is designed to increase flow efficiency of natural gas in pipelines. This lining provides a smooth surface inside the pipe that will increase flow and reduce energy cost of transporting natural gas. Polyclad 951 offers corrosion protection of pipes during storage. It fully meets criteria of API RP 5L2 for gas transmission pipelines.
Features	<ul style="list-style-type: none"> • Improves flow efficiency in gas pipes • Excellent flow and leveling • Single-coat application • Hard, smooth, glossy finish • Excellent abrasion resistance • Meets all criteria of API RP 5L2 • Long pot life
Color	Red 0500
Gloss	70+ @ 60°
Finish	Gloss
Primer	Self-priming
Dry Film Thickness	51 - 102 microns (2 - 4 mils) per coat
Physical Properties	<ul style="list-style-type: none"> • Specific gravity of 1.44 • Weight solids of 80% +/- 1% • Viscosity with 10% thinning is 20-25 seconds Zahn #3 cup • Double viscosity @ 72°F (22°C) after 4 hours
Solids Content	By Volume 64% +/- 1%
HAPs Values	1.48 lbs/solid gallon
Theoretical Coverage Rate	25.2 m ² /l at 25 microns (1027 ft ² /gal at 1.0 mils) 12.6 m ² /l at 50 microns (513 ft ² /gal at 2.0 mils) 6.3 m ² /l at 100 microns (257 ft ² /gal at 4.0 mils) Allow for loss in mixing and application.
VOC Values	As Supplied : 291 g/l (2.43 lbs./gal) Thinner 2 : 12 oz/gal - 349 g/l (2.9 lbs./gal)
Dry Temp. Resistance	Continuous: 120°C (248°F)

SUBSTRATES & SURFACE PREPARATION

General	Surfaces must be clean and dry before abrasive blasting. Employ adequate methods to remove dirt, dust, oil and all other contaminants that could interfere with adhesion of the coating.
Steel	SSPC-SP6, NACE 3, Sa 2 Surface Profile: 1.2-2.5 mils (30-63 microns)

Polyclad 951

PRODUCT DATA SHEET



PERFORMANCE DATA

All test data was generated under laboratory conditions. Field testing results may vary.

Test Method	System	Results
API 5L2	One coat Polyclad 951	Pass

MIXING & THINNING

Mixing | Power mix part A separately, then combine part B in to part A and power mix. **DO NOT MIX PARTIAL KITS.** Requires short 15 min sweat-in time. Mix ratio by volume is 25.7 to 1.

Thinning | Thinning will be required to properly atomize the mixed material. Thin up to 10% (13 oz/gal) with Thinner #2 or #76. Use of thinners other than those supplied by Carboline may adversely affect product performance and void product warranty, whether expressed or implied.

Pot Life | 6 Hours at 75°F (24°C) usable pot life

APPLICATION EQUIPMENT GUIDELINES

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.

Conventional Spray | Pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, .070" I.D. fluid tip and appropriate air cap. Adjust air pressure to approximately 50 psi at the gun and provide 10-20 lbs. of pot pressure.

Airless Spray | Pump Ratio: 30:1 (min.)
Material Hose: 3/8" I.D. (min.)
Tip Size: .013"-.021"
Output PSI: 1800-2500
Filter Size: 60 mesh
PTFE packings are recommended and available from the pump manufacturer

Brush | Recommended for small areas and repairs only. Use a high quality medium bristle brush, and apply a very light crisscross brush coat. Allow to dry for approximately 5 minutes. Normally, a film thickness of 1-2 mils (25-50 microns) can be obtained per coat by this method.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	16°C (60°F)	10°C (50°F)	10°C (50°F)	0%
Maximum	32°C (90°F)	52°C (125°F)	49°C (120°F)	90%

This product simply requires the substrate temperature to be above the dew point. Condensation due to substrate temperatures below the dew point can cause flash rusting on prepared steel and interfere with proper adhesion to the substrate.

CURING SCHEDULE

Surface Temp.	Dry to Handle	Dry to Touch
21°C (70°F)	10.5 Hours	5 Hours
32°C (90°F)	5 Hours	2 Hours

CLEANUP & SAFETY

Cleanup	Use Thinner #2 or Acetone. In case of spillage, absorb and dispose of in accordance with local applicable regulations.
Safety	Read and follow all caution statements on this product data sheet and on the MSDS for this product. Employ normal workmanlike safety precautions.
Ventilation	When used as a tank lining or in enclosed areas, thorough air circulation must be used during and after application until the coating is cured. The ventilation system should be capable of preventing the solvent vapor concentration from reaching the lower explosion limit for the solvents used. User should test and monitor exposure levels to insure all personnel are below guidelines. If not sure or if not able to monitor levels, use MSHA/NIOSH approved supplied air respirator
Caution	This product contains flammable solvents. Keep away from sparks and open flames. All electrical equipment and installations should be made and grounded in accordance with the National Electric Code. In areas where explosion hazards exist, workmen should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

PACKAGING, HANDLING & STORAGE

Shelf Life	Part A & B: Min. 24 months at 75°F (24°C) When kept at recommended storage conditions and in original unopened containers.
Shipping Weight (Approximate)	5 Gallon Kit - 65 lbs (29 kg)
Storage Temperature & Humidity	40° - 110°F (4° - 43°C) 0-100% Relative Humidity
Flash Point (Setaflash)	Part A: 20°F (-6.6°C) Part B: 55°F (12°C)
Storage	Store Indoors.

WARRANTY

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