

## SELECTION & SPECIFICATION DATA

<b>Generic Type</b>	Two component hybrid epoxy
<b>Description</b>	Polyclad 975 LT is an advanced 100% solids, hybrid epoxy pipeline coating. Polyclad 975 LT is designed to provide excellent protection to buried pipe and can be applied in cold temperatures. Polyclad 975 LT can be used for new pipe or rehabilitation of coated pipe and anywhere Polyclad 975 is recommended and cold cure conditions exist. This coating cures fast to allow quick QC and backfill times. Polyclad 975 LT is packaged for bulk spray and hand application.
<b>Features</b>	<ul style="list-style-type: none"> <li>• Quick dry to touch and QC times even in low temperatures.</li> <li>• May be applied down to 0°F (-18°C)</li> <li>• Excellent cathodic protection performance</li> <li>• Film build up to 50 mils DFT in one coat</li> <li>• Good edge retention</li> <li>• Excellent adhesion to steel, epoxy coating and fusion bonded epoxy.</li> <li>• Can be applied by spray, brush, roller or dual cartridge</li> </ul>
<b>Color</b>	Green (0300), Grey (0700) and Black (C900)
<b>Finish</b>	Semi-Gloss (Epoxies lose gloss, discolor and eventually chalk in sunlight exposure.)
<b>Primer</b>	Self-priming
<b>Dry Film Thickness</b>	20 - 30 mils (508 - 762 microns) Typical DFT with hand application 20 - 50 mils (508 - 1270 microns) per spray application  Application up to 50 mils in one coat, hand or spray applied is acceptable.
<b>Solid(s) Content</b>	100% solids by volume
<b>VOC Values</b>	<b>As Supplied</b> : 0 lbs./gal (0 g/L)  Calculated
<b>Dry Temp. Resistance</b>	Continuous: 200°F (93°C) Non-Continuous: 250°F (121°C)
<b>Approvals</b>	Meets criteria for AWWA C210-7

## SUBSTRATES & SURFACE PREPARATION

<b>General</b>	All sharp edges shall be ground to produce a radius and all imperfections, such as, delaminations, scabs, slivers and slag shall be corrected prior to abrasive blasting. Degrease surface prior to abrasive blast in accordance to SSPC SP-1. Organic solvents, alkaline solutions, steam, hot water with detergents or other systems that will completely remove dirt, oil, grease, etc. may be used
<b>Steel</b>	Steel substrate must be blasted to a minimum Near-White Metal Finish (SSPC SP10 or NACE NO. 2) with a 2.5 to 4.5 mil (62 to 112 microns) dense, sharp angular profile.

# Polyclad 975 LT

## PRODUCT DATA SHEET



### PERFORMANCE DATA

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

Test Method	System	Results
Adhesion to blasted steel	20 - 30 mils DFT (500 to 750 microns)	>2,500 psi
Adhesion to sanded FBE	20 to 30 mils DFT (500 to 750 microns)	>3,000 psi
Cathodic Disbondment ASTM G-95, 24°C (75°F), -1.5 V, 28 days	20 to 30 mils DFT (500 to 750 microns)	6 mm at 0°F cure (-18°C), 4 mm at 75°F (24°C) cure
Cathodic Disbondment ASTM G-95, 65°C (149°F), -1.5 V, 28 days	20 to 30 mils DFT (500 to 750 microns)	8 mm at 32°F (0°C) cure, 10 mm at 75°F (24°C) cure.
Chemical resistance immersion per AWWA C-210.	20 to 30 mils DFT (500 to 750 microns)	Pass
Chemical tested: 10% Nitric Acid	20 to 30 mils DFT (500 to 750 microns)	Pass
Chemical tested: 10% Sodium Chloride	20 to 30 mils DFT (500 to 750 microns)	Pass
Chemical tested: Toluene	20 to 30 mils DFT (500 to 750 microns)	Pass
Flexibility, CSA Z245.20-10 (12.11) at 23°C	27 to 30 mils DFT (686 to 750 microns)	2.88°/pd
Impact resistance, ASTM D2794	20 to 30 mils DFT (500 to 750 microns)	68 inch pounds
Shore D hardness, ASTM D2240	30 to 40 mils DFT (750 to 1000 microns)	80

### MIXING & THINNING

<b>Mixing</b>	Power mix part A and part B separately until uniform for plural airless spray application. Do not over mix or incorporate air by mixing too fast. Hand apply kits are hand mixed until color is consistent. Warm material will be easier to mix.
<b>Thinning</b>	Thinning is not required.
<b>Ratio</b>	4:1 Ratio by volume (A to B)
<b>Pot Life</b>	10 min. at 60°F (16°C)

### 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.

<b>General</b>	<p>Spray application is performed with heated plural airless equipment. If you have questions about equipment specifics please contact Carboline's Technical Service at 1-800-848-4645.</p> <p>Sprayed material requires A and B components to be warm as recommended for proper mixing and atomization. Hand application does not require heat but below 50°F the A component becomes stiff and more difficult to mix. Some contractors keep hand mix kits in an insulated container to keep them warm until ready for use.</p> <p>Material brushed or rolled onto a very cold pipe quickly cools and becomes stiff. Raising the pipe temperature temporarily provides more working time to spread the material.</p> <p>Polyclad 975 LT cures in very low temperature. If cold applied material warms rapidly it will go thru a short softening phase before it's final cure.</p>
----------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## 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.

<b>Airless Spray</b>	<p>Use fixed ratio (4:1 by volume) heated plural component spray equipment with heated hoppers, heated hoses leading to a mixer manifold and static mixer, attach to a 15 to 25 ft. ¼" ID whip hose (depending on tip size used) followed by an airless gun utilizing self-cleaning reverse "a" tips from 0.019-0.031 inches.</p> <p>Check with Carboline's Technical Service Department to review your application set up. 1-800-848-4645</p> <p>Note: Heat the "A" side material to 110 to 130°F (43-54°C) and the "B" side material to 90 to 100°F (32-38°C). Fluid pressure will range from 2500 to 3500 psi. This will ensure proper spraying. Take care to prevent the mixed material from setting up in your whip hoses. For best results, keep your whip hoses as short as possible, purge them immediately if work is interrupted, keep them insulated from hot surfaces.</p>
<b>Brush &amp; Roller (General)</b>	<p>One and two liter kits are recommended for hand application. first mix the coating to uniform color and pour onto surface while spreading the coating to desired thickness using a drywall blade, stiff brush or roller. The best option for you will depend on ambient and pipe temperature and pipe diameter. Warm material, 50°(10°C)or warmer will mix and apply better.</p>

## CURING SCHEDULE

Surface Temp.	Dry to Handle	Dry to Touch	Maximum Recoat Time
0°F (-18°C)	6 Days	24 Hours	8 Days
20°F (-7°C)	5 Days	16 Hours	6 Days
35°F (2°C)	6 Hours	3 Hours	6 Days
50°F (10°C)	4 Hours	2 Hours	4 Days
65°F (18°C)	3 Hours	1 Hour	4 Days
75°F (24°C)	2 Hours	1 Hour	4 Days

Dry to touch includes dry to spark test and touch-up or re-coat. Dry to handle includes dry to backfill. Polyclad 975 LT will cure down to 0°F (-18°C). The cure rate accelerates as temperature rises. In cold conditions Polyclad 975 LT hardens enough to spark test before the full cure, often during the same shift. Touch-up of holidays can occur then as well or any time the coating is firm enough to resist damage from the procedure. Full cure will take place according to the table above. Over-coating after the maximum recoat time requires that the surface be abraded prior to application. Use a medium grit, 60 to 80 grit paper or sweep blast to roughen the surface. Clean abraded area of dust before recoat or repair. For temperatures above 75°F use standard Polyclad 975.

## CLEANUP & SAFETY

<b>Cleanup</b>	Use Thinner #2 or Thinner 225E (VOC Exempt). In case of spillage, absorb and dispose of in accordance with local applicable regulations.
<b>Safety</b>	Read and follow all caution statements on this product data sheet and on the SDS for this product. Employ normal workmanlike safety precautions.
<b>Ventilation</b>	While this is a solventless epoxy, it is common practice when used as a tank lining or in enclosed areas to circulate the air during and after application until the coating is cured. Minimal protection is needed when proper ventilation is achieved.
<b>Caution</b>	If product is thinned with 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.

# Polyclad 975 LT

## PRODUCT DATA SHEET



### PACKAGING, HANDLING & STORAGE

<b>Shelf Life</b>	Part A: 12 months Part B: 12 months *Shelf life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.
<b>Storage Temperature &amp; Humidity</b>	40° - 110°F (4° - 43°C) 0-90% Relative Humidity
<b>Storage</b>	Store Indoors.
<b>Shipping Weight (Approximate)</b>	5 Gallon Kit: 70 Lbs. (32 Kg) 20 Gallon Kit: 280 Lbs. (127 Kg) 1 litre kit: 4 Lbs (1.8 Kg) 2 litre kit: 8.5 lbs (3.8 Kg.) 940 ml cartridges 750 ml cartridges
<b>Flash Point (Setflash)</b>	Polyclad 975 LT Part A: >400°F (204°C) Polyclad 975 LT Part B: >350°F (177°C)

### WARRANTY

To the best of our knowledge the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. User must contact Carboline Company to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to Carboline quality control. We assume no responsibility for coverage, performance, injuries or damages resulting from use. Carbolines sole obligation, if any, is to replace or refund the purchase price of the Carboline product(s) proven to be defective, at Carbolines option. Carboline shall not be liable for any loss or damage. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY CARBOLINE, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. All of the trademarks referenced above are the property of Carboline International Corporation unless otherwise indicated.