

POLYLINE GPM

SELECTION DATA

GENERIC TYPE: Modified aluminium epoxy mastic.

GENERAL PROPERTIES: A self-priming, high-build coating with excellent adhesion to rusted steel and most aged paints.

- Proven field performance.
- Excellent performance over minimal surface preparations.
- Excellent application characteristics.
- Excellent film build on edges.
- Compatible with most aged coatings.
- Single coat for most applications.
- Meets the most stringent VOC (Volatile Organic Content) regulations.

RECOMMENDED USES: Particularly recommended for maintenance painting of rusty steel or upgrading old coatings. Ideal for offshore structures, marine, metal buildings, piping, process equipment, highway bridges and exposed structural steel. Hand or power tool cleaning is often acceptable. May also be used where hand tool cleaned steel is being coated for the first time.

NOT RECOMMENDED FOR: Immersion service in acids, alkalis or solvents.

TYPICAL CHEMICAL RESISTANCE:

<u>Exposure</u>	<u>Immersion</u>	<u>Splash & Spillage</u>	<u>Fumes</u>
Acids	NR	Fair	Very Good
Alkalies	NR	Good	Excellent
Solvents	NR	Good	Excellent
Salt Water	Excellent *	Excellent	Excellent
Water	Excellent*	Excellent	Excellent

* Discolours to grey.

TEMPERATURE RESISTANCE: (Non-immersion)

Continuous:	82°C
Non-continuous	121°C

SUBSTRATES: Properly prepared steel, rusty steel, aged galvanised steel or others as recommended.

COMPATIBLE COATINGS: May be used over most generic types of coatings which are tightly adhered and properly prepared. A test patch is recommended over existing coatings. A mist coat may be required over inorganic zinc to minimise bubbling. A topcoat is not normally required but most generic types of coatings may be applied as topcoats.

SPECIFICATION DATA

THEORETICAL SOLIDS CONTENT OF MIXED MATERIAL:

	<u>By Volume</u>
POLYLINE GPM	90% ± 2%

VOLATILE ORGANIC CONTENT:

The following are nominal values:

As Supplied: 88 grams/litre

Thinned:

<u>Thinner</u>	<u>Thinned</u>	<u>Grams/Litre</u>
P10	25%	242
P76	25%	231

RECOMMENDED DRY FILM THICKNESS:

125 microns on steel substrates (Measured excluding the rust). 75 microns over existing coatings.

For severe exposures including immersion, a minimum total thickness of 175 microns applied in one or two coats is recommended.

Dry film thickness in excess of 250 microns per coat is not recommended. Excessive film thickness over inorganic zinc coatings will increase possibility of damage during shipping and erection.

THEORETICAL COVERAGE:

36.0 sq. m/l at 25 microns

7.2 sq. m/l at 125 microns

STORAGE CONDITIONS:

Store Indoors

Temperature: 7-43°C

Humidity: 0-90%

SHELF LIFE: 24 months when stored indoors at 24°C.

COLOUR: Aluminium is standard.

ORDERING INFORMATION

Prices may be obtained from your Polymer Group Sales Representative.

APPROXIMATE SHIPPING WEIGHT:

	<u>8-l Kit</u>	<u>20-l Kit</u>
Polyline GPM	11 kg	28 kg
	<u>4-l</u>	<u>20-l</u>
Thinner P10	4 kg	18 kg
Thinner P76	4 kg	17 kg

FLASH POINT: (Setaflash)

POLYLINE GPM Part A	>93°C
POLYLINE GPM Part B	24°C
Thinner P10	28°C
Thinner P76	-6°C

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APPLICATION INSTRUCTIONS - POLYLINE GPM

These instructions are not intended to show product recommendations for specific service. They are issued as an aid in determining correct surface preparation, mixing instructions and application procedure. It is assumed that the proper product recommendations have been made. These instructions should be followed closely to obtain the maximum service from the materials.

SURFACE PREPARATION: Remove all oil or grease from the surface to be coated with Thinner P2 in accordance with SSPC-SP 1.

Steel: NON-IMMERSION SERVICE: Power tool or hand tool clean in accordance with SSPC-SP 11, SSPC-SP 3 or SSPC-SP 2 to produce a rust-scale free surface. Water blasting, or sweep blast per SSPC-SP7 (Sa 1) is acceptable.

For new construction or more severe environments, abrasive blast to a commercial blast in accordance with SSPC-SP6 (Sa 2)

WATER IMMERSION SERVICE: Abrasive blast to a Near White Metal Finish in accordance with SSPC-SP 10 (Sa 2½) and obtain a 50-75 micron blast profile.

MIXING: Power mix each component separately, then combine and power mix in the following proportions:

	<u>8-litre</u>	<u>20-litre</u>
Polyline GPM Pt A	4 lt	10 lt
Polyline GPM Pt B	4 lt	10 lt

THINNING: May be thinned up to 25% with Thinner PCM. To extend pot life, may be thinned up to 25% with Thinner P76.

NOTE: Use of thinners other than those supplied or approved by Carboline may adversely affect product performance and will void product warranty, whether express or implied.

POT LIFE: Four hours at 24°C when thinned 25%, two hours at 24°C unthinned and one hour at 32°C unthinned. Thinner P76 may be substituted to extend pot life to 2 hours at 32°C. Pot life ends when coating becomes too viscous to use.

APPLICATION CONDITIONS:

	<u>Material</u>	<u>Surfaces</u>	<u>Ambient</u>	<u>Humidity</u>
Normal	18-29°C	18-29°C	18-29°C	35-80%
Minimum	10°C	10°C	10°C	0%
Maximum	32°C	54°C	38°C	95%

Do not apply when surface temperature is less than 3°C above the dew point.

Special thinning and application techniques may be required above or below normal conditions.

SPRAY: The following spray equipment has been found suitable and is available from manufacturers such as Binks, DeVilbiss and Graco.

Conventional: Pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, .086" I.D. fluid tip and appropriate air cap.

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Airless:

Pump Ratio:	30:1 (min.) *
GPM Output:	3.0 (min)
Material Hose:	3/8" I.D. (min)
Tip Size:	.019-.025"
Output pressure:	1900-2100 psi
Filter Size:	60 mesh

* Teflon packings are recommended and are available from the pump manufacturer.

BRUSH OR ROLLER: Use clean natural bristle brush or medium nap phenolic core roller. Work coating into all irregularities.

DRYING TIMES: These times are based on a 125 - 175 micron dry film thickness. Higher film thicknesses, insufficient ventilation or cooler temperatures will require longer cure times and could result in solvent entrapment and premature failure. Dry to touch: 5 hours at 24°C.

<u>Surface</u>	<u>Temperature</u>	<u>Between Coats</u>	<u>Final Cure</u>
	10°C	5 days	15 days
	16°C	3 days	10 days
	24°C	24 hours	5 days
	32°C	18 hours	3 days

Minimum cure time before immersion service is 5 days at 24°C. Final cure temperatures below 16°C are not recommended for tank linings.

MAXIMUM RECOAT TIME:

30 days - epoxies and water based
90 days - Polyurethane

If maximum recoat time has been exceeded the surface must be abraded by sweep blasting prior to the application of any additional coats.

NOTE: This product contains conductive pigments and cannot be holiday tested.

VENTILATION AND SAFETY: 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 vapour concentration from reaching the lower explosion limit for the solvents used. In addition to ensuring proper ventilation, fresh air respirators or fresh air hoods must be used by all application personnel. Where flammable solvents exist, explosion-proof lighting equipment must be used. Hypersensitive persons should wear clean protective clothing, gloves and/or protective cream on face, hands and all exposed areas.

CLEANUP: Use Thinner P2.

CAUTION: READ AND FOLLOW ALL CAUTION STATEMENTS ON THIS PRODUCT DATE SHEET AND ON THE MATERIAL SAFETY DATA SHEET FOR THIS PRODUCT.

CAUTION: CONTAINS FLAMMABLE SOLVENTS. KEEP AWAY FROM SPARKS AND OPEN FLAMES. IN CONFINED AREAS WORKMEN MUST WEAR FRESH AIRLINE RESPIRATORS. HYPERSENSITIVE PERSONS SHOULD WEAR GLOVES OR USE PROTECTIVE CREAM. ALL ELECTRIC EQUIPMENT AND INSTALLATIONS SHOULD BE MADE AND GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. IN AREAS WHERE EXPLOSION HAZARDS EXIST, WORKMEN SHOULD BE REQUIRED TO USE NONFERROUS TOOLS AND TO WEAR CONDUCTIVE AND NONSPARKING SHOES.

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