

SELECTION DATA

GENERIC TYPE: Two component, cross-linked epoxy.

GENERAL PROPERTIES: Polyline EP Rapid is a high solids, low temperature curing, high-build epoxy primer with excellent corrosion resistance and in-shop characteristics. Can be applied to yield a cured film which is tough and abrasion resistant. Performs extremely well under a wide variety of topcoats and application conditions. Available in four standard colours. Features include:

- Utilises the latest technology in anti corrosive pigment
- Excellent corrosion protection
- Rapid Cure - For quick handling and topcoating.
- Can be applied down to 2 °C
- Excellent tolerance of damp (not wet) substrates.
- Can be spray applied at up to 5 mls dry film thickness in one coat.
- Meets the most stringent VOC (Volatile Organic Content) regulations.

RECOMMENDED USES: Recommended as a general purpose epoxy primer over commercially blasted steel. It is recommended with an appropriate topcoat for protection of structural steel, equipment and tank exteriors exposed to corrosive conditions. Consult Polymer Group Technical Service Department for other specific uses.

NOT RECOMMENDED FOR: Immersion service, splash and spillage of very strong solvents or concentrated acids without a suitable topcoat.

TYPICAL CHEMICAL RESISTANCE:

<u>Exposure</u>	<u>Splash and Spillage</u>	<u>Fumes</u>
Acids	Good	Very Good
Alkalies	Good	Excellent
Solvents	Very Good	Excellent
Salt Solutions	Excellent	Excellent
Water	Excellent	Excellent

TEMPERATURE RESISTANCE

(Non-Immersion):

Continuous:	121 °C *
Non-Continuous:	149 °C

*Coating discolouration may occur at this temperature range or above.

SUBSTRATES: Apply over suitably prepared metal or other surfaces as recommended.

COMPATIBLE COATINGS: As a primer for catalysed epoxies, catalysed urethanes and others as recommended.

April 09 replaces Nov 06

SPECIFICATION DATA

THEORETICAL SOLIDS CONTENT OF MIXED MATERIAL:

POLYLINE EP RAPID	<u>By Volume</u> 80 ± 2%
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VOLATILE ORGANIC CONTENT:*

The following are nominal values:
As supplied: 230 g/l
Utilising Thinner P2 and Thinner P33

<u>Thinner</u>	<u>percent thinned</u>	<u>Grams/Litre</u>
Thinner P2	10	362
Thinner P33	10	364

* May vary slightly with colour.

RECOMMENDED DRY FILM THICKNESS PER COAT:

75 microns, for use in mild environments.
125 microns, for use in more severe environments.
Dry film thicknesses in excess of 250µ per coat are not recommended.

THEORETICAL COVERAGE PER MIXED LITRE *

32 sq. m/l at 25µ
10.7 sq. m/l at 75µ
6.4 sq. m/l at 125µ

* Mixing and application losses will vary and must be taken into consideration when estimating job requirements.

STORAGE CONDITIONS: Store Indoors

Temperature : 4-43 °C
Humidity : 0-90%

SHELF LIFE: Twenty-four months when stored at 24 °C.

COLOUR: Red (0500), Gray (0700), and White (0800) are standard.

GLOSS: Satin

ORDERING INFORMATION

Prices may be obtained from your local Polymer Group sales representative or Customer Service Department.

APPROXIMATE SHIPPING WEIGHT

	<u>8 l.</u>	<u>20 l.</u>
Polyline EP Rapid	11.4 kg	28.5 kg
Thinner P2		17.2 kg
Thinner P33		17.8 kg

FLASHPOINT (Setaflash)

Polyline EP Rapid Part A	6 °C
Polyline EP Rapid Part B	8 °C
Thinner P2	-5 °C
Thinner P33	32 °C

APPLICATION INSTRUCTIONS - POLYLINE EP RAPID

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 oil or grease from surface to be coated with clean rags soaked in Thinner P2 in accordance with SSPC-SP 1.

Steel: Apply over clean, dry steel, abrasive blasted to a Commercial Finish in accordance with SSPC-SP 6 (or NACE #3) to obtain a 25- to 50-micron blast profile.

Mixing: Mix separately, then combine and mix in the following proportions:

	<u>8 l. Kit</u>	<u>20 l. Kit</u>
Polyline EP Rapid Part A	4 l.	10 l.
Polyline EP Rapid Part B	4 l.	10 l.

Thinning: For spray applications, may be thinned up to 10% by volume with Thinner P2. For brush or roller application when temperatures are below 21 °C, use up to 10% by volume with Thinner P2, and when temperatures are above 21 °C, use up to 10% by volume with Thinner P33.

Use of thinners other than those supplied or approved by Polymer Group may adversely affect product performance and void product warranty, whether express or implied.

Refer to Specification Data for VOC Information.

POT LIFE: Four hours at 24 °C and less at higher temperatures. Pot life ends when coating loses body and begins to sag.

APPLICATION CONDITIONS:

	<u>Material</u>	<u>Surfaces</u>	<u>Ambient</u>	<u>Humidity</u>
Normal	16-29 °C	16-29 °C	16-29 °C	0-80%
Min.	4 °C	2 °C	2 °C	0%
Max.	32 °C	57 °C	43 °C	80%

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

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

SPRAY: This is a high solids coating and may require slight adjustments in spray techniques. Wet film thicknesses are easily and quickly achieved. 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, .070" I.D. fluid tip and appropriate air cap.

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Airless:

<i>Pump Ratio:</i>	30:1 (min)*
<i>GPM Output:</i>	3.0 (min)
<i>Material Hose:</i>	3/8" I.D. (min)
<i>Tip Size:</i>	.017-.021"
<i>Output psi:</i>	2100-2300
<i>Filter Size:</i>	60 mesh

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

BRUSH OR ROLLER: Not recommended for large areas. Best suited for touch-up or stripe coat. Use a natural bristle brush, or a 3/8" to 1/2" nap mohair roller. Do not overwork material and maintain a wet edge. Shorter nap covers produce less stipple.

Brush: Use natural bristle brush. Not recommended for large areas. Best suited for touch-up or stripe coat.

Roller: Use 3/8" to 1/2" nap mohair roller. Do not overwork material and maintain a wet edge. Shorter nap covers produce less stipple.

NOTE: More than one application by roller or brush may be required to achieve recommended film build and proper hiding.

DRYING TIMES: These times are for 100- μ dry film thickness. Film thicknesses above 100 microns will lengthen cure times.

Dry to Touch: 1 hr @ 22 °C

Dry to Walk on:* 1 hr @ 22 °C

* With appropriate footwear for cleanliness.

Surface

<u>Temperature</u>	<u>Dry to Handle*</u>	<u>Dry to Topcoat*</u>
2 °C	15 Hours	18 Hours
10 °C	8 Hours	6 Hours
24 °C	4 Hours	3 Hours
32 °C	2 Hours	2 Hours

When Recoating With Itself:

<u>Surface Temperature</u>	<u>Maximum Dry Time</u>
24 °C	8 Hours
32 °C	4 Hours

* Consult Polymer Group Technical Service Department for specific topcoating recommendations. Quicker recoat times may be used with appropriate low temperature curing topcoats.

If allowed to weather, chalking should be removed by water washing and then allowed to dry thoroughly prior to topcoating.

CLEANUP: Use Thinner P2.

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 ELECTRIC 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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