POLYMER GROUP LTD
(ISO 9001)
SOLUTIONS FOR EXTREME ENVIRONMENTS

product data sheet

POLYLINE TEMPERATURE INDICATING PAINT

SELECTION DATA

GENERIC TYPE: Silicone, modified.

RECOMMENDED USES: As a single coat application to pipe work and equipment to isolate hot spots by observing colour change.

GENERAL PROPERTIES: A temperature indicating paint which changes from green to blue at 210°C and from blue to white at 320°C, the latter change taking place more slowly than the first, although the high the temperature the faster the change will be. This reaction is non-reversible.

NOT RECOMMENDED FOR: Immersion service.

CHEMICAL RESISTANCE GUIDE:

Exposure	Splash & Spillage	Fumes
Acids	Good	Excellent
Alkalies	Fair	Excellent
Solvents	Poor	Good
Salts	Good	Excellent
Water	Excellent	Excellent

Flexibility:	Good
Weathering:	Excellent
Abrasion Resistance:	Good

Surfaces: Steel, concrete and inorganic zinc coatings such as the Resist and Barrier range.

Primer required: None required. A prime coat of inorganic zinc, however will greatly increase service life over steel.

SPECIFICATION DATA

Solids Content:

By volume	40 ± 1%
By weight	53 ± 1%

Film Thickness per Coat: 40 microns

Theoretical Coverage per Litre:*
10.6 m²/l at 40 microns

* NOTE: Material losses during mixing and application will vary and must be taken into consideration when estimating job requirements.

SURFACED PREPARATION: For best results a near-white blast in accordance with AS 1627 Class 2½ is recommended. Good performance will be experienced when applied over a commercial or mechanically cleaned surface. All surfaces must be free of dust and grease before application. Grease can be removed with clean rags soaked in Thinner # P2. The zinc-rich primer must be properly cured before application of Polyline Temperature Indicating Paint.

COLOURS: Green only.

APPLICATION DATA

Method of Application: Spray preferred, may be brushed or rolled.

Suggested Spraying Equipment: Other equipment may be more suitable for specific applications.

Conventional	Fluid Tip	Air Cap
Binks #18 or #62	63B	63 PB
DeVilbiss	FX	704
P-MBC or JGA		

Shelf Life: 10 months minimum.
Pack Size: 4-litre can.

Drying Time Between Coats: 2 hours at 23°C.
Final Drying Time: Air dries in 2 to 3 hours to a tack-free film with good hardness. Coating will cure in service on stacks, hot equipment, etc. Allow initial increase in temperature to proceed slowly to 176°C.

Thinner: Thinner # P10. Amount of thinner will vary depending on weather conditions.

Flash Point: (Pensky-Martens Closed Cup).
Polyline Temperature Indicating Paint – 16°C.
Thinner # P10 – 28°C.

APPLICATION INSTRUCTIONS
TEMPERATURE INDICATING PAINT

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 any oil or grease from surface to be coated with Thinner #P2 or other suitable cleaner/degreaser in accordance with SSPC-SP 1.

Steel: Abrasive blast to a near-white finish in accordance with AS 1627 Class 2½ (SSPC-SP 10) and obtain a 25- to 40-micron blast profile.

Mixing: Power-mix to a uniform consistence before thinning.

Thinning: May be thinned up to 12% by volume with Thinner # P10.

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

APPLICATION/CURING CONDITIONS:

	Material	Surfaces	Ambient	Humidity
Normal	16-32°C	18-32°C	16-32°C	10-85%
Minimum	4°C	4°C	4°C	0%
Maximum	38°C	54°C	54°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" ID minimum material hose, .043" ID fluid tip and appropriate air cap.

Airless:

Pump Ratio:	30:1 (min)*
GPM Output:	3.0 (min)
Material Hose:	3/8" ID (min)
Tip Size:	.013 - .015"
Output pressure:	2,200 psi
Filter Size:	60 mesh

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

Brush or Roller: For small touch-up areas only. Use a natural bristle brush, applying with full strokes. Avoid rebrushing or reworking of material. Take care to avoid excessive film thickness. Application by roller is not recommended.

Drying Times: These times are at 40 microns dry film thickness. Higher film thickness will lengthen cure times.

Surface Temperature	Between Coats
10°C	8 hours
15°C	6 hours
24°C	4 hours
32°C	2 hours

Note: Will air dry to touch but will remain soft for handling purposes.

CLEANUP: Use Thinner # P2 or Toluol.

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

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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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