

## TECHNICAL DATA SHEET

## PERMAGRIP PI 480

## **EPOXY PRIMER / INTERMEDIATE (Zinc phosphate & M.I.O)**

<b>DESCRIPTION:</b>	A two component, high solids, fast curing , epoxy coating pigmented with zinc phosphate and micaceous iron oxide (MIO) as an anti corrosive pigment.	
<b>RECOMMENDED USE:</b>	For application on to hand or mechanically prepared steel surfaces giving excellent wetting and adhesion characteristics. It can be used as primer / intermediate for high performance Epoxy - Polyurethane systems.	
<b>RESISTANCE TO:</b>	Moisture – Excellent Abrasion – Excellent Aliphatic Solvents – Excellent Acid spillage - Moderate	Alkali spillage – Excellent Weather – Excellent Petroleum Solvents – Excellent

## PRODUCT INFORMATION:

Colour:	Grey
Finish:	Matt
Volume solids %:	80± 2% (ASTM-D2697-86)
V.O.C.:	170 g/l (NB. – Thinning will affect VOC compliance and volume solids)
Typical thickness:	75 - 200 microns dry film thickness
Density:	1.50 ± 0.1 g/cc (mixed)
Flash point:	Base : 25°C C/A : 31°C
Mixing ratio:	4 : 1 by volume
Shelf life:	24 months from the date of manufacture
Pot life:	6 hours @ 35°C
Pack size:	Comp. A – 16 liters + Comp. B – 4 liters = 20 liters

## FILM THICKNESS AND SPREADING RATE:

ITEM	WORKERS AND SPREADING RATE	WATER	WATER	CHLORINE
Dry film thickness	75	200	μm	
Wet film thickness	94	250	μm	
Spreading rate	10.6	4	m <sup>2</sup> /l (theoretical)	

This figure makes no allowance for surface profile, uneven application, overspray or losses in containers and equipment. Film thickness will vary depending on actual use and specification.

**SERVICE TEMPERATURE:** 120°C maximum dry

**RECOMMENDED THINNER:** Thinner No.5 (5%)

#### **DRYING & CURING TIME:**

<b>SUBSTRATE TEMPERATURE</b>	<b>15°C</b>	<b>23°C</b>	<b>35°C</b>
Touch dry	4 hours	3 hours	2 hour
Dried to over coat (minimum)	8 hours	6 hours	4 hours
Hard dry	48 hours	36 hours	24 hours
Fully cured	10 days	9 days	7 days



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### SURFACE PREPARATION:

Steel: Remove all oil and grease in accordance with SSPC-SP1. Manually prepared surfaces should be prepared in accordance with SSPC-SP2 or SSPC-SP3. For more severe exposure, conditions blast cleaning to SSPC-SP 7 may be required. Abrasive blast clean to Sa 2 ½ BS7079:Part A1:1989. Average surface Profile 35 - 75 microns.

### RECOMMENDED COATING SYSTEM:

Primer	PERMAGRIP P 400
Topcoat:	PERMATHANE T 137

Note: The above mentioned is a generally used system for steel structures, and if any alternative systems are required, please contact the KPC's technical team.

### RECOMMENDED APPLICATION METHODS:

Airless spray, conventional spray, roller, brush

### APPLICATION EQUIPMENT DETAILS:

#### AIRLESS SPRAY:

Nozzle Size: 0.38mm (18 thou)  
 Fan Angle: 40°  
 Operating Pressure: 115kg/cm<sup>2</sup> (2200 psi)

#### CONVENTIONAL SPRAY

Nozzle Size: 1.27mm (50 thou)  
 Atomising Pressure: 2.8kg/cm<sup>2</sup> (40 psi)  
 Fluid Pressure: 0.7kg/cm<sup>2</sup> (10 psi)

### APPLICATION CONDITIONS AND OVER COATINGS:

This material should preferably be applied at temperatures in excess of 10°C. In conditions of high relative humidity, i.e. 80-85%, good ventilation conditions are essential. Substrate temperature should be at least 3°C above the dew point and always above 0°C. At application temperatures below 10°C, drying and curing times will be significantly extended, and spraying characteristics may be impaired. Application at ambient air temperatures below 5°C is not recommended.

### HEALTH AND SAFETY:

Please observe the precautionary notices displayed on the container. Do not breathe or inhale mist. Avoid skin contact. Spillage on the skin should immediately be removed with suitable cleanser, soap and water. Eyes should be well flushed with water and medical attention sought immediately.

Consult Product Health and Material Safety Data Sheet for information on safe storage, handling and application of this product.

***Disclaimer:*** The information in this document is given to the best of KPC Paint's knowledge that based on laboratory testing and practical experience. Products are often used under conditions beyond KPC's control and KPC Paints cannot guarantee anything but the quality of the product itself.

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