

## TECHNICAL DATA SHEET

# PERMATHANE T 137

## 2K POLYURETHANE FINISH

**DESCRIPTION:** A high performance, two component and hydroxyl acrylic polyurethane topcoat, providing excellent resistance of weathering, water and chemicals.

**RECOMMENDED USE:** As long-term protection of high-performance topcoat, widely used for bridges, petrochemicals, power generations, steel structures, wind power, port machineries and offshore facilities etc. under medium or heavy corrosion environment.

**RESISTANCE TO:**

Moisture – Good	Alkali spillage – Moderate
Abrasion – Good	Acid spillage - Moderate
Weather – Excellent	Aliphatic Solvents – Good

### PRODUCT INFORMATION:

Color: Full range of colors & Aluminum finish as per KPC STD  
 Finish: Matt, Semi-gloss, & High gloss  
 Volume solids %: 50 ± 3 % (ASTM-D2697-86)  
 V.O.C.: 435 g/l (NB.-Thinning will affect VOC compliance and volume solids)  
 Typical thickness: 40 - 75 microns dry film thickness  
 Theoretical coverage: 10 m<sup>2</sup>/liter. @ 50 microns dft  
 Density: 1.12 ± 0.1 g/cc (mixed)  
 Flash point: Base: 24°C C/A: 32°C  
 Mixing ratio: 4: 1 by volume  
 Shelf life: 24 months from the date of manufacture  
 Pot life: 2 hours @ 35°C  
 Pack size: Comp. A – 16 liters + Comp. B – 4 liters = 20 liters

FILM THICKNESS AND SPREADING RATE:	MIN.	MAX.	UNIT
Dry film thickness	40	75	µm
Wet film thickness	80	150	µm
Spreading rate	12.5	6.66	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.7 (10 %)

### DRYING & CURING TIME:

SUBSTRATE TEMPRATURE	15°C	23°C	35°C
Touch dry	1 hour	45 mins	30 mins
Hard dry	24 hours	18 hours	12 hours
Fully cured/Cured for service	10 days	7 days	4 days

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### SURFACE PREPARATION:

All surfaces should be clean, dry and free from contamination. The surface should be assessed and treated. Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

### RECOMMENDED COATING SYSTEM:

**Primer:** Permazinc IO 90, Permazinc 90, Permagrip PI 480,  
Permagrip P 400, Permagrip P 984, Permaprime 984 ZR

**Intermediates:** Permagrip PI 480, Permagrip IT 401, Permagrip IT 653,  
Permagrip MIO 80, Permagard IT 653

**Topcoat:** Permathane T 137

### RECOMMENDED APPLICATION METHODS:

Airless spray	Conventional spray
Brush	Roller

### APPLICATION EQUIPMENT DETAILS:

#### AIRLESS SPRAY

Nozzle Size: 0.38mm (21 thou)  
Fan Angle: 40°  
Operating Pressure: 115kg/cm<sup>2</sup> (3000 psi)

#### CONVENTIONAL SPRAY

Nozzle Size: 1.27mm (50 thou)  
Atomizing Pressure: 3.5 Kg/cm<sup>2</sup> (50 psi)  
Fluid Pressure: 0.7 Kg/cm<sup>2</sup> (1s0 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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