



## **OXYHIN SDN. BHD.** (393471-X)

HQ : LOT 1, JALAN 13/3, 46200 PETALING JAYA, SELANGOR DARUL EHSAN, MALAYSIA.  
TEL: 03-79565599, 79586636 FAX: 03-79565232, 79565799  
E-MAIL: oxyhin@po.jaring.my, oxyhin@streamyx.com



BR: 968, JLN. PERUSAHAAN, KWS. PERUSAHAAN PERAI, 13600 PERAI, PENANG, MALAYSIA.  
TEL: 04-3971233, 3971488 FAX: 04-3901266  
E-MAIL: oxyhinpg@po.jaring.my, oxyhinpg@streamyx.com

### **TECHNICAL DATA SHEET**

#### **OXYPLAST PR280 OUTDOOR DURABLE CLEAR POLYESTER POWDER COATING**

OXYPLAST PR280 is a thermosetting powder coating based on saturated polyester resins specially selected for exterior use. It is formulated to give excellent clarity and flow-out besides outstanding resistance to atmospheric ageing and ultra-violet light.

PR280 provides protection against scuffing and scratching of polished or plated metallic articles, and serves a protective and decorative function when applied as top-coat over a metallic base coat.

#### **APPLICATIONS**

As topcoat over metallic base coat on auto wheels etc.  
Protection of polished or plate surfaces of lamps, switch & plug box covers etc.

#### **SUBSTRATES AND PRE TREATMENT**

Not normally applied to dull or blemished metallic surfaces.

#### **APPLICATION SCHEDULE**

May be applied by electrostatic spraying using classic devices which can provide a negative tension of 60 – 80 kV. The powder is cured in a suitable convection or infra red oven.

Curing : 10 mins at 200°C (metal temperature)

Optimal film thickness : 50 – 70µm. Clarity of the film decreases with thickness.

#### **PROPERTIES OF THE POWDER**

Melting range (Kofler) : 90 – 100°C

Specific gravity (DIN 55990/3) : 1.25 ± 0.05

Particle size distribution  
(Laser Particle size analyser)

% above 100µm : Less than 5

% above 32µm : 55 - 65

Average particle size, µm : 35 - 45



## OXYHIN SDN. BHD. (393471-X)

HQ : LOT 1, JALAN 13/3, 46200 PETALING JAYA, SELANGOR DARUL EHSAN, MALAYSIA.  
TEL: 03-79565599, 79586636 FAX: 03-79565232, 79565799  
E-MAIL: oxyhin@po.jaring.my, oxyhin@streamyx.com



BR: 968, JLN. PERUSAHAAN, KWS. PERUSAHAAN PERAI, 13600 PERAI, PENANG, MALAYSIA.  
TEL: 04-3971233, 3971488 FAX: 04-3901266  
E-MAIL: oxyhinpg@po.jaring.my, oxyhinpg@streamyx.com

### PROPERTIES OF THE COATING

#### a. Physical and Mechanical

The following are typical properties of PR280 determined on 0.5mm gauge degreased galvanised steel :

Film thickness (ISO 2178)	: 50 – 70µm
Flow out	: Very good
Gloss (ISO 2813,60 degree)	: > 90%
Adhesion (ISO 2409)	: GT= 0
Pencil hardness	
(ASTM D3363 - Staedtler Lumograph)	: H – 2H
Conical mandrel (ISO 6860)	: Pass at 4mm diameter
Direct impact	
(ASTM D2794-0.625in diameter ball)	: 65kg.cm
Reverse impact	
(ASTM D2794-0.625in diameter ball)	: 65kg.cm
Heat resistance, 30mins at 200°C	: Good

#### b. Salt spray Resistance

According to ASTM B117-73 on

Chromated Aluminium, 2000hrs	: No blistering or loss of adhesion
Zinc phosphated steel, 1000hrs	: 3-6mm undercutting
Iron phosphated steel, 1000hrs	: 8-10mm undercutting

#### c. Accelerated Weathering

According to ASTM G53-88

1000 hrs QUV test	: Excellent gloss retention.
(4hrs UVB - 313nm AT 60°C	Negligible chalking.
4hrs Condensation at 50°C)	

### STORAGE

At temperatures  $\leq 25^{\circ}\text{C}$  dry condition and humidity  $< 60\%$ , PR280 powder may be stored for up to 6 months without affecting their free flowing properties. The coating thus will still have optimal characteristic.

All the information given in this Data Sheet is the results of our research work and experience. It is given in good faith and with every belief in its accuracy but cannot be considered as a formal warranty. In accordance with OXYPLAST policy of product development, this specification is subject to change without notice.