

# INFORMATION SHEET

## POWDER COATING



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## Epoxy-Polyester Powder

### Description

Epoxy-polyester powder coating is based on specially selected resins to give the hard durable finish associated with epoxy coating but with superior heat stability and exterior durability. Typical applications are those where a tough decorative finish is desirable such as domestic appliances and office furniture. For use requiring ultimate heat and stability and outside durability polyester powder should be used.

### Application Areas

<b>Camping equipment</b>	<b>Light fittings</b>
<b>Cookers</b>	<b>Office furniture</b>
<b>Domestic appliances</b>	<b>Partitioning</b>
<b>Electrical cabinets</b>	<b>Radiators</b>
<b>Garden tools</b>	

### Finishes

Gloss - TLM-G      Rapid Cure - Low Bake

Semigloss - TLM - S      Standard Cure

Any colour by arrangement subject to quantity.

### Curing Schedules

Rapid Cure - 190°C - 6 mins

Low Bake - 160°C - 11 mins

### Coating Thickness

Minimum 40 microns

Preferred 50 - 65 microns

### Particle Size

100% below 90 microns

### Specific Gravity

1.3 - 1.8 depending on colour and finish

### Application

Suitable for application by proprietary manual or automatic corona discharge equipment and triboelectric charging guns.

### Pretreatment

It is essential to ensure that the surface to be coated is free from dust, rust, scale, oil, etc.

Chemical pretreatment of the substrate is essential to increase the long term corrosion resistance. Further information is given in our publication 'Application of Powder Coatings'.

## Shelf Life

TLM - G 6 months from date of manufacture  
TLM - S 12 months from date of manufacture

## Storage

Store below 25°C in dry conditions

## Health and Safety

Use in accordance with the Code of Safe Practice published by the Paintmakers Association of Great Britain, "Application of Powder Coatings by Electrostatic Spraying". Copies are available on request.  
To prevent inhalation of airborne powder face masks capable of removing respirable dust should be worn. Skin contact should be avoided and any deposited powder removed with soapy water.  
Some powders, mainly bright red and yellow shades, contain lead chrome and cadmium pigments.  
Further information is given in our Health and Safety Sheet.

## Coating Properties

Test panels: 50 microns thickness applied to lightweight zinc phosphated steel.

## Physical Properties

			TLM - S	TLM - G
Flexibility	BS3900 E1	Pass	6	3
Scratch	BS3900 E2	Pass	4	4
Impact	BS1391			
	Direct	Pass	80	100
	Reverse	Pass	80	100
Erichsen cupping	BS3900 E4	Pass	6	8
Cross hatch	BS3900 E6	Pass	100	100

## Environmental Properties

Humidity resistance	BS3900 F2	Pass	hours	1000
Salt spray resistance	ASTM B117	Pass	hours	1000
Water resistance	BS3900 G2	Pass	hours	1000

## Detergent Resistance

No blistering after 50 hours in 2% boiling tide

## Boiling Water Resistance

No blistering after 50 hours

## Solvent and Chemical Resistance

Good resistance to acids, alkalis and solvents at room temperature. May be attacked by dilute nitric acid, ketones and trichloroethylene. Refer to Information sheet "Chemical Resistance of Powder".

## Exterior Durability

Some chalking will occur after six months but protective qualities are unimpaired providing adequate pretreatment is used.

## Heat Resistance

White and pale colours resistant to yellowing at continuous temperatures up to 100°C. Dark colours can be subjected to higher temperatures.

Data quoted is typical but may vary from product to product. Environmental results are not applicable to metallic finishes.

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