

Epoxy Powder

Description

Epoxy powder coating is formulated to give hard durable protective finishes with excellent adhesion and chemical resistance. It has good electrostatic charging properties and excellent transfer efficiency.

Recommended uses include general industrial components and applications requiring a good all round coating, such as household goods.

When long term exterior durability or heat stability is essential a powder from our range of epoxy-polyesters and polyesters should be selected.

Application Areas

Ceiling panels
Display shelving
Heaters
Household goods
Instrument casings

Internal vehicle components
Sports equipment
Tubular steel furniture
Wirework

Finishes

Gloss - TLE-G

Semigloss - TLE - S

Matt - TLE-M

Any colour by arrangement subject to quantity.

Curing Schedules

TLE - G 10 mins at 180°C metal temperature

TLE - S 12 mins at 180°C metal temperature

TLE - S Rapid Cure 8 mins at 185°C metal temperature

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

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 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

Flexibility	BS3900 E1	Pass	mm	S	S/M	G
Scratch	BS3900 E2	Pass	kg	6	6	3
Impact	BS1391			4	4	4
	Direct	Pass	in lbs	80	80	100
	Reverse	Pass	in lbs	80	80	100
Erichsen cupping	BS3900 E4	Pass	mm	6	6	8
Cross hatch	BS3900 E6	Pass	%	100	100	100

Environmental Properties

Humidity resistance	BS3900 F2	Pass	hours	250	250	1000
Salt spray resistance	ASTM B117	Pass	hours	250	250	1000
Water resistance	BS3900 G2	Pass	hours	1000	1000	1000

Solvent and Chemical Resistance

Excellent resistance to a wide range of chemicals at room temperature including acids, alkalis and solvents. May be affected by ketones. Refer to Information sheet "Chemical Resistance of Powder".

Exterior Durability

Progressive chalking will occur but protective qualities are unimpaired providing adequate pretreatment and thickness are applied.

Heat Resistance

Gradual yellowing will occur at continuous temperatures above 100°C. Data quoted is typical but may vary from product to product. Environmental results are not applicable to metallic finishes.

Our data sheets and sales literature are issued for the purpose of supplying general product information. In view of the variation of conditions under which products may be used or this information may be applied, we cannot accept responsibility for loss, damage or accident of any nature (or infringement of patent rights) which may result from the use or application of the information or the products. For specific confirmation of any details in the product information or use and application please apply to the company in writing.