

EpoZinc 1000 Primer

Product Code

EpoZinc 1000, 317-1S100P-3235

Product Description:

An epoxy-based powder coating primer, rich in zinc, designed to give excellent corrosion protection over steel substrates.

It must be coated with a second coat, usually a polyester coating for exterior use. However an epoxy or hybrid second coat could be used for interior use.

This product is suitable for either electrostatic or Tribo application.

Powder Properties:

A thermosetting powder coating containing >40% w/w zinc.

Gloss

Semi-gloss 60% ± 5

Specific Gravity

2.6 g/cm³

Coverage

Approximately 6.5 m²/kg at 60 microns film thickness.

Curing Schedule

Normal Cure:

10 minutes at 180° Celsius (Object Temperature)

Technical Properties

General

All tests carried out on degreased iron-phosphated steel coated with EpoZinc 1000 to 60µm followed by RAL 9010 827 range polyester.

Hardness (ISO 2815) Buchholz Indentation Test

>80

Flexibility-Bend Test (ISO 1519)

(BS 3900: Part E1: 1970)

>5 mm (3/16 inch) diameter Mandrel

Adhesion (ISO 2409)

Cross hatch (BS 3900: Part E6: 1974)

Classification Gt 0

Cupping Test (ISO 1520)

(BS 3900: Part E4: 1976)

>5 mm

Impact Test – Falling Weight (ECCA T5)

(BS 3900: Part E7: 1974)

>25 kg cm (N)

Colour(s)

A mid grey colour

Storage Stability

Store in a dry, cool (<20°C) environment – 6 months.

Health and Safety

Consult the health and safety data sheet indicated on the label.

Corrosion Resistance

Neutral Salt Spray (ASTM B117)

a) Steel, iron phosphate with final rinse sealant

Creep:- <3mm

Adhesion 0

b) Steel, shot-blasted to SA2.5

Creep:- <3mm

Adhesion 0

Humidity (DIN 50017, BS 3900: Part F2: 1973)

More than 1000 hours without any effect.

Boiling Water Resistance

After 2 hours boiling water, or 1 hour pressure cooker: no defects or detachment.

Recommendations for Use

For best corrosion resistance:

- Degrease
- Pre-treat the substrate with a multi-stage pre-treatment process (either an iron or zinc phosphate coat is recommended) to obtain adequate adhesion. Shot-blasting may also be used (minimum requirement: SA 2.5, SIS 55900 or DIN 55978)
- Apply a coating build of at least 60µm.
- Fully cure the primer but do not over-bake.
- Apply and cure topcoat as soon as possible after applying primer. Do not handle before overcoating.
- The topcoat may be applied whilst the primer is still hot.
- If there is a considerable delay in applying a topcoat then the primer may need to be slightly abraded to achieve an adequate 'key'.

In the unlikely event of poor adhesion between primer and topcoat:

- Check curing conditions of primer – ensure that the primer is not over-cured. Under-curing the primer e.g. 3 minutes at 150 C Object Temperature may help adhesion.
- Check with the supplier of the topcoat that it is suitable for over-coating onto an epoxy primer.

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