

DATA SHEET 1132

5 06.06.2017

INFRALIT EP/PE 8121, 8122, 8125, 8126

Epoxy/Polyester Powder

PAINT TYPE

INFRALIT EP/PE 8121, 8122, 8125, 8126 powder coatings based on epoxy and polyester resin,

which at elevated temperatures melts, cures and forms the final paint film.

USAGE

INFRALIT EP/PE 8121, 8122, 8125, 8126 Epoxy/Polyester Powders are suitable for coating metal industry products, such as lighting fixtures, apparatuses, wire gratings and refrigerating fixtures.

SPECIAL PROPERTIES

The mechanical and chemical resistance and the anticorrosive properties of INFRALIT EP/PE 8121, 8122, 8125, 8126 Epoxy/Polyester Powders are almost equal to those of epoxies.

On outdoor exposure INFRALIT EP/PE 8121, 8122, 8125, 8126 Epoxy/Polyester Powders, like

epoxy/polyester powders in general, has a tendency towards matting down (chalking) similar to that of pure epoxies. On the other hand, its tendency to yellow on over curing and exposure to ultraviolet light is minor as compared with epoxy powders.

TECHNICAL DATA

Spraying Variant EP/PE...-00 is suitable for both tribo charging and for corona charging sprays. Variants...-02

and...-09 only for corona charging sprays.

Colours By agreement.

Gloss grades EP/PE 8121 - effect resembling sandpaper

EP/PE 8122 - wavy structure EP/PE 8125 - gloss EP/PE 8126 - semigloss

Solids 100%

Specific gravity Abt. 1,25 - 1,70 kg/dm³ depending on colour

Spreading rate 4 - 15 m²/kg depending on the film thickness

Film thickness One application gives a film thickness of 40 - 150 μm .

When painting with EP/PE 8122 powders the suitable film thickness is to be found by application tests

individually for each powder. The film thickness is typically around 100 - 150 μm .

Curing time 15 min/160°C (metal temperature)

or

10 min/180°C (metal temperature).

or

8 min/190°C (metal temperature)

When curing is done above 190°C, slight reduction of gloss and in light colours also yellowing may

occur.

Packages 15 kg or 20 kg according to the specific gravity of the powder.

Storage In dry and cool conditions.

SAFETY PRECAUTIONS

The powder itself is non-flammable, but with air it can form an explosive mixture that in presence of adequate ignition energy ignites. The lower explosive limit is about 70 g/m³ (Bundesanstalt für Materialprüfung). Ventilation of the spray booth should be adjusted so that the concentration of powder in the air is less than 50% of the lower explosive limit value. On calculation of the powder concentration in the spray booth, the powder deposited on the workpiece is not taken into account. In order to avoid the discharge of powder from the booth into adjacent working spaces, the speed of air flow in the apertures of the booth must not fall below 0.5 m/s.

Spray painters should wear dust masks and protective gloves. Any spatter of powder on the skin should be washed off with water and soap.

less than 5 mm

GT 0

DIRECTION FOR USE Surface preparation

COLD-ROLLED SURFACES: Degrease by trichloroethylene vapour bath or alkali wash. Zinc phosphating is also required if the workpiece will be subjected to exceptional strain indoors.

ALUMINIUM SURFACES: Degrease by e.g. alkali wash. Surfaces to be exposed to severe atmospheric conditions

should also be chromated.

HOT-DIP-GALVANIZED AND ZINC-ELECTROPLATED SURFACES: Remove grease and white rust by e.g. alkali

wash. Depending on exposure conditions, zinc phosphating or chromating is also required.

FILM PROPERTIES

Substrate cold-rolled steel, curing time 15 min/160°C:

Physical properties

Flexibility (Erichsen, ISO 1520)

over 7 mm

Impact resistance (ASTM D 2794; 15.9 mm diameter) - direct

more than 40 lbin (45 kgcm) more than 40 lbin (45 kgcm) - reverse 180 s

Pendulum hardness (König, SFS 3642) Flexibility (ISO 1519)

Adhesion (cross-cut test, EN ISO 2409)

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