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DATA SHEET 1070
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INFRALIT EP/PE 8093
Conductive Epoxy/Polyester Powder

PAINT TYPE

INFRALIT EP/PE 8093 is a powder coating based on mixture of epoxy and polyester resin, which at elevated temperatures melts, cures and forms a conductive paint film.

USAGE

INFRALIT EP/PE 8093 is developed for areas within the electronics industry where static electricity forms a problem.

SPECIAL PROPERTIES

The surface resistance of INFRALIT EP/PE 8093 is conductive 0 - 0,5 MOhm measured at a film thickness of about 70 µm and with 100 voltage.

INFRALIT EP/PE 8093 forms a film that has very good mechanical properties, such as abrasion resistance, impact resistance and elasticity.

TECHNICAL DATA

Spraying

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

Colours

By agreement.

Gloss grades

Semigloss
Variant EP/PE...-04: effect resembling sandpaper.
Variant EP/PE...-05: wavy structure.
Variant EP/PE...-06: wavy structure.
Variant EP/PE...-08: 40 - 80.
Variant EP/PE...-09: 30 - 50.

Solids

100%

Specific gravity

Abt. 1,7 kg/dm³

Spreading rate

7 - 9 m²/kg depending on the film thickness

Film thickness

70 ± 20 µm. Too thick films are to be avoided, as they weaken the special properties.

Curing time

15 min/180°C (metal temperature)
Variant EP/PE...-01: 20 min/160°C (metal temperature)
Variant EP/PE...-09: 10 min/200°C (metal temperature)

Packages

20 kg

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.

PTO

DIRECTION FOR USE

Surface preparation

Remove all grease and dirt with care. Mere degreasing can be done e.g. by trichloroethylene vapour bath or alkali wash. Blast-clean or etch and phosphate rusty and mill-scaled surfaces.

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.

FILM PROPERTIES

The following results have been obtained with the standard grade, curing 15 min/180°C, film thickness 70 µm:

Physical properties

Flexibility (Erichsen, ISO 1520)	7 mm
Impact resistance (Erichsen, SFS EN ISO 6272)	
- direct	40 kgcm
- reverse	40 kgcm
Pendulum hardness (König, SFS 3642)	180 s
Flexibility (SFS ISO 6860)	less than 5 mm
Adhesion (cross-cut test, EN ISO 2409)	GT 0

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