

**INFRALIT EP/PE 8281, 8283,
8285, 8287, 8289
Epoxy/Polyester Powder**

PAINT TYPE	INFRALIT EP/PE 8281, 8283, 8285, 8287, 8289 powder coatings based on epoxy and polyester resin, which at elevated temperatures melts, cures and forms the final paint film.
USAGE	INFRALIT EP/PE 8281, 8283, 8285, 8287, 8289 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 8281, 8283, 8285, 8287, 8289 Epoxy/Polyester Powders are almost equal to those of epoxies. On outdoor exposure INFRALIT EP/PE 8281, 8283, 8285, 8287, 8289 Epoxy/Polyester Powders, like epoxy/polyester powders in general, have a tendency towards matting down (chalking) similar to that of pure epoxies. On the other hand, their 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 corona charging sprays.
Colours	By agreement.
Gloss grades	EP/PE 8281: effect resembling sandpaper EP/PE 8283: 30 ± 5 EP/PE 8285: 55 ± 5 EP/PE 8287: 72 ± 10 EP/PE 8289: above 85
Solids	100%
Specific gravity	Abt. 1,5 - 1,9 kg/dm ³ depending on colour
Spreading rate	4 - 15 m ² /kg depending on the film thickness
Film thickness	One application gives a film thickness of 40 - 150 µm.
Packages	20 kg
Storage	Store in dry and cool conditions, between 5 - 25°C.

Curing time

	160°C		180°C		200°C	
	min.	max.	min.	max.	min.	max.
EP/PE 8281	15 min	30 min	10 min	20 min	8 min	15 min
EP/PE 8283	-	-	10 min	20 min	8 min	15 min
EP/PE 8285	15 min	30 min	10 min	20 min	8 min	15 min
EP/PE 8287	15 min	30 min	10 min	20 min	8 min	15 min
EP/PE 8289	15 min	30 min	10 min	20 min	8 min	15 min

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.

DIRECTION FOR USE**Surface preparation**

COLD-ROLLED SURFACES: Degrease by trichloroethylene vapour bath or alkali wash. Zinc phosphating or a suitable conversion treatment is also required if the workpiece is destined for outdoor exposure or 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 or alternatively treated with a suitable conversion treatment.

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 or a suitable conversion treatment is also required.

HOT-ROLLED SURFACES AND CASTINGS: Remove grease and dirt. Blast-clean at least to grade Sa 2½ (ISO 8501-1). The surface profile at least medium (G) ISO 8503-2 . Remove the dust.

FILM PROPERTIES

Substrate cold-rolled steel, curing time 10 min/180°C:

Physical properties

Flexibility (Erichsen, ISO 1520)	over 5 mm
Impact resistance (Erichsen, SFS EN ISO 6272)	-
- direct	above 60 kgcm
- reverse	above 60 kgcm
Flexibility (ISO 1519)	less than 5 mm
Adhesion (cross-cut test, EN ISO 2409)	GT 0

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