

## **DATA SHEET 1075** 6 14.08.2018

## INFRALIT EP/PE 8140 Epoxy/Polyester Powder

PAINT TYPE	INFRALIT EP/PE 8140 is a powder coating based on epoxy and polyester resin, which at elevated temperatures melts, cures and forms the final paint film.
USAGE	INFRALIT EP/PE 8140 Epoxy/Polyester Powder is 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 8140 Epoxy/Polyester Powder are almost equal to those of epoxies. On outdoor exposure INFRALIT EP/PE 8140 Epoxy/Polyester Powder, 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 baking and exposure to ultraviolet light is minor as compared with epoxy powders.

TECHNICAL DATA			
Colours	By agreement. Gloss, semigloss and matt		
Gloss grades			
Solids	100%		
Specific gravity	Abt. 1,2 - 1,8 kg/dm³		
Spreading rate	4 - 15 m²/kg depending on the film thickness		
Film thickness	One application gives a film thickness of 40 - 150 μm.		
Curing time	EP/PE 8140-00, -02 and -05: 10 min/180°C (metal temperature) EP/PE 8140-01 and -08: 10 min/160°C (metal temperature)		
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/m <sup>3</sup> (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.		

ΡΤΟ

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 needed if the workpiece will be subjected to exceptional strain.		
	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 g 8501-1). The surface profile at least medium (G) ISO 8503-2 . Remove the dust.		
FILM PROPERTIES			
	Substrate 0.8 mm thick cold-rolled steel, curing time 10 min/180°C, film thickness 70 $\mu\text{m}$	:	
Physical properties	Flexibility (Erichsen, ISO 1520) Impact resistance (Erichsen, SFS EN ISO 6272)	over 5 mm	
	- 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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