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DATA SHEET 1070 **INFRALIT EP/PE 8093** 07.08.2018 **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/dm<sup>3</sup> 7 - 9 m²/kg depending on the film thickness Spreading rate **Film thickness** 70  $\pm$  20  $\mu$ m. 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) 20 kg Packages 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.

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 $\mu$ m:	
Physical properties	Flexibility (Erichsen, ISO 1520) Impact resistance (Erichsen, SFS EN ISO 6272)	7 mm
		8
		0
	Flexibility (SFS ISO 6860)	less than 5 mm
	Adhesion (cross-cut test, EN ISO 2409)	GT 0
	Flexibility (Erichsen, ISO 1520) Impact resistance (Erichsen, SFS EN ISO 6272) - direct - reverse Pendulum hardness (König, SFS 3642) Flexibility (SFS ISO 6860)	7 mm 40 kgcm 40 kgcm 180 s less than 5 mm

The information of this data sheet is normative and based on laboratory tests and practical experience. Teknos guarantees that the product quality conforms to our quality system. Teknos accepts, however, no liability for the actual application work, as this is to a great extent dependent on the conditions during handling and application. Teknos accepts no liability for any damage resulting from misapplication of the product. This product is intended for professional use only. This implies that the user possesses sufficient knowledge for using the product correctly with regard to technical and working safety aspects. The latest versions of Teknos data sheets, material safety data sheets and system sheets are on our home pages www.teknos.com.

