

INFRALIT PE 8921

Polyester Powder

PAINT TYPE	INFRALIT PE 8921 polyester powder is based on polyester resin free of TGIC. At elevated temperatures the powder melts, cures and forms the final paint film.
USAGE	INFRALIT PE 8921 is suitable for objects which require a highly weather-resistant coating, especially for coating of aluminium objects.
SPECIAL PROPERTIES	<p>INFRALIT PE 8921 forms a mechanically and chemically resistant paint film which has good corrosion resistance and good colour stability and gloss retention also in outdoor conditions.</p> <p>INFRALIT PE 8921-00 is a general variant suitable for both corona and tribo spraying.</p> <p>Variant PE 8921-02 is suitable for corona only.</p> <p>Variant PE 8921-09 is a metallic or pearlescent colour designed for corona charging spray.</p> <p>Variant PE 8921-16 imitates the appearance of natural rust. Suitable for objects where rusty looking painted surface is desired.</p>
APPROVALS	<p>Qualicoat approval number P-1000, Cat. 1, Cl. 1.</p> <p>Quality-System Approval (Module D) number EUFI29-22005225-MED and EC Type-Examination Certificate (Module B) number EUFI29-21000602-2-MED according to Marine Equipment Directive (2014/90/EU).</p> <p>NFPA 130:2020 Standard for Fixed Guideway Transit and Passenger Rail Systems, Chapter 8 - Vehicles</p> <ul style="list-style-type: none">- ASTM E 162:2016 Standard Test Method for Surface Flammability of Materials Using a Radiant Heat Energy Source- ASTM E 662:2017 Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials
TECHNICAL DATA	
Colours	By agreement. Metallic and pearlescent shades possible.
Gloss 60°	Textured effect, with gloss that is 5 - 15.
Spreading rate	6 - 10 m ² /kg depending on the film thickness
Film thickness	The recommended film thickness is 60 - 100 µm.
Curing time	<p>Curing time indicates the time needed for the curing of the paint. Curing parameters and oven type may effect the colour and gloss of the paint.</p> <p>10 - 25 min/180°C (metal temperature). 9 - 15 min/190°C (metal temperature). 7 - 12 min/200°C (metal temperature).</p> <p>The temperature of the powder coating has to reach the temperature inside the paint shop before the package is opened. The application properties may be deteriorated, if the temperature of the powder is lower than this.</p>
Storage	<p>The storage life is minimum 18 months in dry and cool conditions when the temperature during storage and transportation is max. 25°C.</p> <p>The recommended expiry date of the powder coating that has been stored according to the instructions is shown on the package label.</p>

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 for polyester powder is about 80 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 STEEL: Degreasing and zinc phosphating.

ALUMINIUM: Degreasing and chromating or alternatively a suitable conversion treatment.

FILM PROPERTIES

Substrate chromated aluminium (100 x 300 x 0.6 mm). Stoving 15 min/180°C, film thickness 60 - 70 µm. Testing 1 h after stoving:

Typical values

Flexibility (Erichsen, ISO 1520)	over 6 mm
Impact resistance (ASTM D 2794; 15.9 mm diameter)	
- direct	over 2,5 Nm
- reverse	over 2,5 Nm
Flexibility (ISO 1519)	less than 5 mm
Adhesion (cross-cut test, EN ISO 2409)	GT 0

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.
