

INFRALIT EP/PE 8086-05

Zinc epoxy polyester powder

INFRALIT EP/PE 8086-05 is a powder coating based on epoxy and polyester resin containing metallic zinc, which has very good anticorrosive properties. At elevated temperature the powder melts, cures and forms the final paint film.



INFRALIT EP/PE 8086-05 is mainly suitable for use on steel surfaces blast-cleaned to preparation grade Sa 2½, when the constructions will be exposed to severely corrosive environments. The product is designed mainly for use as a primer.

INFRALIT EP/PE 8086-05 forms a mechanically resistant paint film that has good anticorrosive properties. The surface can be overcoated with INFRALIT Powder Coating or some other suitable paint.

Teknos sales department should be contacted if the intention is only to melt the primer before applying the top coat.

Overbaking of INFRALIT EP/PE 8086-05 powder coating must be avoided when overcoating. If the stoving temperature of the primer is higher than 205°C, the adhesion between the coats may be diminished. We recommend that intercoat adhesion is always checked when direct fired gas oven is used in two layer painting.

TECHNICAL DATA

Fields of application	Steel constructions, Transportation equipment, Machinery
Recommended substrate	Steel, Zinc
Binder	Epoxy-polyester
Solids	100%
Practical spreading rate	Approx. 6 m ² /kg depending on the film thickness.
Film thickness	Approx. 60 µm above the peaks of the surface profile.
Colours	Dark grey.
Gloss (60°)	Semi-gloss
Density	2.6 kg/dm ³
Storage	The storage life is minimum 18 months in dry and cool conditions when the temperature during storage and transportation is max. +25°C.

Take special care during high temperature seasons. Avoid storing close to heat sources and heaters in trucks and storages. Don't store in direct sunlight. The recommended expiry date of the powder coating that has been stored according to the instructions is shown on the package label.

DIRECTION FOR USE

Surface preparation

STEEL SURFACES: Remove grease and dirt. After that blast-cleaning at least to preparation grade Sa 2½ (ISO 8501-1) and/or a suitable chemical pretreatment.

ALUMINIUM SURFACES: Remove grease and dirt. After that chromating or alternatively a suitable chemical pretreatment.

HOT-DIP-GALVANIZED AND ZINC-ELECTROPLATED SURFACES: Remove grease, dirt and white rust by e.g. alkali wash. Depending on exposure conditions, chromating or alternatively a suitable chemical pretreatment is also required.

Application method

Corona charging spray

Curing time

10 min/180°C (substrate temperature)

Curing time indicates the time needed for the curing of the coating.

Curing parameters and oven type may effect the colour and gloss of the coating.

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.

HEALTH AND SAFETY

Safety and precaution measures

See safety data sheet.

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 explosion limit of typical powder coatings is between 20 g/m³ and 80 g/m³ (CEPE, Safe Powder Coating Guideline 8th Edition, 2020). 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. Welding is to be avoided due to the zinc content of the powder.

FILM PROPERTIES

Typical values

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

Bend test (Conical mandrel) SFS ISO 6860, mm	OK
Cross-cut test ISO 2409	GTO
Cupping ISO 1520, mm	7.0
Impact resistance, ISO 6272-2, direct, kgcm	40.0
Impact resistance, ISO 6272-2, reverse, kgcm	40.0
Pendulum damping test ISO 1522, s	180.0

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