

INFRALIT EP/PE 8235-30

Epoxy/polyester powder



INFRALIT EP/PE 8235-30 is a powder coating based on a mixture of solid epoxy and polyester binders. At elevated temperature the powder will melt, cure and form the final paint film.

INFRALIT EP/PE 8235-30 is suitable for coating objects where high hygiene management is needed. INFRALIT EP/PE 8235-30 contains BioCote® silver phosphate glass antimicrobial technology to preserve the coating surface and prevent colonisation and degradation caused by microbial growth on the paint film once applied to the intended substrate.

It's recommended as coating solution for hygiene management of public spaces, such as hospitals, schools, offices and meeting rooms.

INFRALIT EP/PE 8235-30 forms a film with mechanical and chemical resistance and good anticorrosive properties. On outdoor exposure INFRALIT EP/PE 8235-30 epoxy/polyester powder has a tendency towards matting down (chalking) similar to that of pure epoxies. On the other hand, its tendency to yellow on overbaking and exposure to heat and ultraviolet light is minor as compared with epoxy powders.

TECHNICAL DATA

Active ingredient	INFRALIT EP/PE 8235-30 enhanced with BioCote® antimicrobial technology has been tested for antimicrobial performance in accordance with ISO 22196:2011 and exhibited a minimum of 95% and up to 99.99% reduction in the population of Escherichia Coli and Methicillin Resistant Staphylococcus Aureus (MRSA). Testing was carried out by an independent laboratory.
Fields of application	Transportation equipment, Playgrounds, Bathroom, Furniture, Kitchen furniture, Household appliances
Recommended substrate	Aluminium, Steel, Zinc
Binder	Epoxy-polyester
Solids	100%
Practical spreading rate	4 - 15 m ² /kg depending on the film thickness.
Film thickness	The recommended film thickness is 40 - 150 µm. The optimal film thickness must be defined case-specifically by test applications. In some cases the film thickness might exceed the previously mentioned maximum value.
Colours	By agreement.
Gloss (60°)	Matt
Density	Approx. 1.25 - 1.70 kg/dm ³ depending on colour.

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.

Packaging

20 kg.

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

Tribo charging spray, Corona charging spray

Curing time

10 min/200°C (substrate temperature)

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

Curing parameters and oven type may affect 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.

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.

FILM PROPERTIES

Typical values	Substrate 0.8 mm thick cold-rolled steel, curing 15 min/+180°C, film thickness 70 µm. Testing 1 h after curing:
Bend test (Conical mandrel) SFS ISO 6860, mm	OK
Cross-cut test ISO 2409	GT0
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

Teknos Group Oy Takkatie 3, P.O.Box 107 FI-00371 Helsinki, Finland Tel. +358 9 506 091

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