INFRALIT SI 8009-02

Silicone powder

INFRALIT SI 8009-02 is a powder coating based on solid silicone resin. The silicone resin gives the powder a very good resistance to heat. At elevated temperature the powder will melt, cure and form the final paint film.

INFRALIT SI 8009-02 silicone powder is used whenever especially good resistance to heat is required. Product can be used at temperatures up to 600°C. The powder also has good weather resistance properties and can therefore be used both indoors and outdoors. The suitability of the metallic colours for outdoor use should be discussed with the paint manufacturer.

Due to the special property of this product the mechanical properties are not on a par with those of conventional powders. With this product we recommend using a fluidization hopper.

TECHNICAL DATA

Fields of application	Fireplace, Machinery, Sauna
Recommended substrate	Steel, Zinc
Binder	Silicone
Solids	100%
Practical spreading rate	7 - 12 m²/kg depending on the film thickness.
Film thickness	The recommended film thickness is 50 - 90 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	Black. The original colour and gloss may change in high working temperatures.
Gloss (60°)	Matt
Density	Approx. 1.5 kg/dm³
Storage	In dry and cool conditions max. 12 months depending on the temperature (5 - 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. Blast-clean at least to grade Sa 2½ (ISO 8501-1). The surface profile at least medium (G) ISO 8503-2. Remove the dust.
Application method	Corona charging spray
Curing time	30 min/200°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. 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 steel plates Sa 2 ½, curing 30 min/+200°C, film thickness 60 - 80 µm. Testing 1 h after curing:
Cross-cut test ISO 2409	GT0
Cross-cut test ISO 2409 100h/500°C	GT0
Cross-cut test ISO 2409 100h/600°C	GT1

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