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INFRALIT EP 8054-01 AK10670700 and AK10670020

Epoxy Powder

PAINT TYPE

INFRALIT EP 8054-01 is a fine-grained powder coating based on epoxy resin. At elevated temperatures the powder melts, cures and forms the final paint film.

USAGE

INFRALIT EP 8054-01 Epoxy Powder is used as primer when coating preheated steel pipes with polyolefines.

SPECIAL PROPERTIES

The resultant paint film has excellent mechanical properties, i.e. good abrasion and impact resistance and elasticity. It is not scratched easily and withstands action by acids, alkalis, greases and solvents. Its anticorrosive properties are also good.

TECHNICAL DATA

Colours	Pipe grey
Gloss grades	Semigloss
Average particle size	55 - 65 µm (ISO 8130-13)
Gel time	205°C / 30 - 50 s (ISO 21809-1 Annex J)
Moisture content, mass loss	<0.6% (ISO 21809-1 Annex K)
Hot water adhesion	≤ 2 (24 hours, 65 °C) ISO 21809-2 Annex A15 ≤ 3 (28 days, 65 °C) ISO 21809-2 Annex A15
Specific gravity	1.45-1.55 kg/dm³ (ISO 21809-1 Annex N)
Spreading rate	2 - 10 m²/kg depending on the film thickness
Film thickness	Min. 60 µm above the peaks of the surface profile
Curing time	2 min/215°C (metal temperature) 1 min/230°C (metal temperature)
Glass transition temperature of the cured film	98 - 108°C, DSC - ISO 21809-1 Annex D
Glass transition temperature	Tg1 = 60 - 70°C, DSC - ISO 21809-1 Annex D Tg2 = 98 - 108°C , DSC - ISO 21809-1 Annex D delta H = 23 - 53 J/g, DSC - ISO 21809-1 Annex D
Glass transition temperature tolerance	-2°C to +3°C, DSC - ISO 21809-1 Annex D
Packages	20 kg box or 700 kg big bag
Storage	In dry and cool conditions 6 - 12 months depending on the temperature (5 - 25°C).

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 epoxy powder is about 60 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.

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DIRECTION FOR USE

Surface preparation and application	Remove grease and dirt. Blast-clean at least to grade Sa 2½ (ISO 8501-1). Preheat the blast-cleaned steel before application.