Technical Datasheet

Interpon HT PEPA

High surface hardness heat resistant powders coatings

Product description

Interpon HT PEPA (Polyester Polyanhydride) is a series of high surface hardness heat resistant powders specifically formulated for use on cooking utensils, stoves, radiators and domestic appliances when overbake stability and yellowing resistance are important. **Interpon HT PEPA** is available in Black & Grey metallic in fine text texture. Typical End-use: Cooking utensils, stoves, radiators and domestic appliances.

Powder properties

	Typical value
Chemical Type	Polyester
Density	1.2 - 1.7 g/cm³, depending on colour and effect
Recommended film thickness	60 - 90µm
Shelf life	12 months below 25 ºC
Storage Conditions	Dry, cool conditions
Curing schedule	15 min at 210°C 20 min at 200°C 30 min at 190°C (at object temperature)

Pre-treatment

Aluminium components should receive a full multi-stage chromate conversion coating or suitable chrome-free pre-treatment or suitable pre-anodising to clean and condition the substrate. Detailed advice should be sought from the pre-treatment supplier.
Iron phosphate and particularly Zinc phosphating of ferrous metals improves corrosion resistance. Aluminium substrates may require a chromate conversion coating.

Application

Powders can be applied by manual or automatic electrostatic spray equipment.
Unused powder can be reclaimed using suitable equipment and recycled through the coating system. Re-coat (overcoating) is not recommended.
Applicators and fabricators are advised to use a single batch for parts that will be assembled together. Differences are more likely with special effect powders.
Bonded products have better application properties than blended products (more stable) but attention should still be paid to line settings in order to avoid “marble effect” and changes in aspect after recycling.
Different substrates (aluminium, steel, galvanized steel…), use of primer, and big changes in film thickness may give a different aspect.
Products with different codes should not be mixed even if same colour and gloss.
It is recommended that for consistent application and appearance product be fluidized during application.

Application Method	(depends on the product, please consult Akzo Nobel for more information), Tribo, Electrostatic
Recycling	Unused powder can be reclaimed using suitable equipment and recycled through the coating system, but a minimum of 70% virgin powder should be used.

Revision Date: V1, 26.05.2024
Region: EMEA

Technical Datasheet

Interpon HT PEPA

High surface hardness heat resistant powders coatings

Test conditions

Actual product performance will depend upon the circumstances under which the product is used.
Testing has been determined under laboratory conditions using the following application properties and is for guidance only.

Chemical testing on degreased steel panels

Pre-treatment	Sand blasting
Substrate	0.6mm degreased steel
Curing schedule	15 min at 210°C (object temperature)
Film Thickness	60 - 70µm

Mechanical tests

	Typical value	Method/standard
Adhesion	Class 0	ISO 2409 (2 mm Crosshatch)
Erichsen cupping	Pass 6 mm	ISO 1520
Flexibility	Pass 5 mm	ISO 1519
Impact resistance	≥25 kg.cm	ISO 6272-2 (d/r)

Chemical and durability tests

Whilst maintaining the general protective and anti-corrosive properties of powder coatings, aluminum and copper/bronze metallic finishes, when submitted to the listed tests, may rapidly show a loss of metallic aspect. The results shown are based on tests which (unless otherwise indicated) have been carried out under laboratory conditions and are given for advice only, actual performance depends upon the circumstances under which the product is used.

	Typical value	Method/standard
Chemical Resistance	Excellent resistance to acid, alkalis, oils and chemicals at room temperatures.	
Salt spray test	Pass, no corrosion creep more than 3 mm from scribe, 500 h	ISO 9227

Environmental and durability tests

	Typical value	Method/standard
Humidity	Pass - no blistering or loss of gloss, 1000 h	ISO 6270-2 CH (Constant humidity)
Exterior durability	Not recommended for outdoor applications.	

Revision Date: V1, 26.05.2024
Region: EMEA

Technical Datasheet

Interpon HT PEPA

High surface hardness heat resistant powders coatings

Additional Testing

	Typical value
Thermal Exposure	500 hours @ 120°C 100 hours @ 160°C 12 hours @ 190°C *No cracking, neither film detachment, it keeps good adhesion properties. Overbake stability & yellowing resistance as well as Chemical resistance against cleaning chemicals.

Maintenance

For specific advice on Cleaning and Maintenance, please follow Powder Coatings: Cleaning & Maintenance of Surfaces for Industrial use available from AkzoNobel.

Repair

Surface preparation	Damaged areas must be clean and free of grease or rust. Dry-sand the area with 600 grade paper down to the substrate. The area must be completely free of dust and cleaned with a non-aggressive solvent before proceeding.
Application	For repairs a PU (2K or 1K) liquid paint is recommended.

Additional Information

The customer/coater has to check the efficacy of the complete cycle, pretreatment/coating/polymerization, evaluating the performances on the finished handwork. It's therefore strongly recommended to perform some "life" tests (the simulation of the real use of the coated piece) in the absence of which AkzoNobel declines any responsibility to the customer/coater.

Safety Precautions

This product is intended for use only by professional applicators in industrial environments and should not be used without reference to the relevant health and safety data sheet which Akzo Nobel has provided to its customers.

Disclaimer

Revision Date: V1, 26.05.2024

Region: EMEA