Technical Datasheet

Interpon 700

EJ412JR

Epoxy-Polyester powder coatings

Product description

Interpon 700 is a series of epoxy polyester hybrid powder coatings offering an optimum combination of decorative and protective qualities and granting very high chemical and mechanical properties of the cured film. These powders are commonly recommended for indoor usage.

Interpon 700 powders are available in the full range of colors in gloss, satin, textured, metallic and other special finishes or can be custom matched to the user's requirements.

Approvals

Resistance to Fire Approval	A2,s1,d0 with film thickness up to 120 µm (generic epoxi-polyester 700) according to EN13501-1

Powder properties

	Typical value
Chemical Type	Epoxy-polyester
Appearance	Coarse Texture
Color	RAL 5005
Density	1.2 - 1.7 g/cm³
Gloss (60°)	15 - 30 GU
Recommended film thickness	70 - 80 µm
Shelf life	24 months
Storage Conditions	Under dry, cool (≤ 30°C) conditions (open boxes must be resealed)
Curing schedule	15-20 min at 180°C 8-12 min at 190°C 5-7min at 200°C (object temperature)

Pre-treatment

Aluminium, steel or Zintec surfaces to be coated must be clean and free from grease.
Iron phosphate and particularly Zinc phosphating of ferrous metals improves corrosion resistance. Aluminium substrates may require a chromate conversion coating.

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Application

All powders can show small color differences from batch to batch, this is normal and unavoidable.
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.
Products with different codes should not be mixed even if same colour and gloss.
Different substrates (aluminium, steel, galvanized steel…), use of primer, and big changes in film thickness may give a different aspect.
While AkzoNobel take every precaution to minimize visible differences, this cannot be guaranteed.
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.
A good protection is linked with the recommended film thickness.
It is recommended that for consistent application and appearance product be fluidized during application.
Powders can be applied by manual or automatic electrostatic spray equipment.

Application Method	Electrostatic
Recycling	A constant ratio between virgin and recycled powders should be fixed by the coater in order to achieve a consistent effect following the AkzoNobel rules. Unused powder can be reclaimed using suitable equipment and recycled through the coating system, but a minimum of 70% virgin powder should be used. For solid shades, unused powder can be reclaimed Please consult AkzoNobel for further details as to the correct mixing ratio for virgin/reclaim powder.

Post application

Contact, even for a short duration with certain household products and chemicals, can cause irreversible changes in the gloss and appearance. We recommend that a test is carried out on a non-visible area before using these types of products on this coating.

Test conditions

The results are based on mechanical and chemical tests which (unless otherwise indicated) have been carried out under laboratory conditions and are given for guidance only.
Testing has been determined under laboratory conditions using the following application properties and is for guidance only.

Pre-treatment	Zinc Phosphate
Substrate	Polished steel
Curing schedule	15 min at 180°C (object temperature)
Film Thickness	70 - 80 µm

Mechanical tests

	Typical value	Method/standard
Adhesion	Class 0	ISO 2409 (2 mm Crosshatch)
Erichsen cupping	Pass 5 mm	ISO 1520
Impact resistance	≥30 kg.cm	ISO 6272-2 (d)

http://www.interpon.com/contact-us/

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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	Generally good resistance to acid, alkalis and oil 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	Some chalking after 6-12 months continuous outdoor exposure but less than pure epoxies. Protective properties not impaired. Not recommended for outdoor applications	

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. Any damage of the coating system must be repaired as soon as possible.
Application	For repairs a PU (2K or 1K) liquid paint is recommended.

Additional Information

Interpon 700 powders are available in bright Aluminium finishes which are susceptible to scratching and finger marking. For these products, protection by use of a clear polyester topcoat is recommended when the coated article is to be subjected to physical or environmental damage. The topcoat should ideally be applied within 2 hours of the metallic coating and gloves should be worn when handling the metallic coated articles.

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.

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