Technical Datasheet

Interpon 600

Exterior durable polyester powder coatings

Product description

Interpon 600 is a range of polyester TGIC powder coatings designed for exterior exposure with good weather resistance from just one application. The coatings sustain a longer lifespan and are available in a wide range of colors and finishes which allow your product to shine. The Interpon 600 offers not only beautiful aesthetics but also a performance to match. It is ideally suited to a broad range of exterior applications including outdoor furniture, playground equipment, signs, fencing, vending machines and general metal finishing. Can also be used for indoor application if required.

The Interpon 600 range provides total flexibility to satisfy every need. It includes a range of finishes including smooth, fine and coarse textures to suit any application, as well as gloss levels from deep matt to high gloss. And with color and shades including metallics that meet the appropriate standards such as RAL, Pantone and NCS.

Approvals

Resistance to Fire Approval	A2,s1,d0 with film thickness up to 120 µm (generic polyester 600) according to EN13501-1

Powder properties

	Typical value
Chemical Type	Polyester – TGIC
Density	1.2 - 1.9 g/cm³
Recommended film thickness	60 - 90µm
Shelf life	24 months below 30 ºC 12 months below 35 ºC
Storage Conditions	Under dry, cool (≤ 30°C) conditions (open boxes must be resealed)
Curing schedule	20-25 min at 180°C 15-20 min at 190°C 10-15 min at 200°C 8-12 min at 210°C (object temperature)

Pre-treatment

Galvanised steel requires surface preparation by either multi-stage pretreatment using either zinc phosphate or chromate conversion or controlled sweep blasting. Depending on the type of galvanizing, degassing or use of anti-bubbling additives may be required – follow the procedural advice of the pretreatment supplier.
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

Powders can be applied by manual or automatic electrostatic spray equipment.
A good protection is linked with the recommended film thickness.
All powders can show small color differences from batch to batch, this is normal and unavoidable.
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.

Post application

For specific advice on the suitability of post coating processes such as bending or the use of sealants, adhesives, thermal break, cleaning etc. Please consult AkzoNobel.
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

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.

Pre-treatment	Zinc Phosphate
Substrate	Polished steel
Curing schedule	10 min at 200°C (object temperature)
Film Thickness	60 - 70µm

Mechanical tests

	Typical value	Method/standard
Adhesion	Class 0	ISO 2409 (2 mm Crosshatch)
Erichsen cupping	Pass 5 mm	ISO 1520
Flexibility	Pass 5 mm	ISO 1519
Hardness	Pass - no penetration to substrate	ISO 1518-1 (2000g)
Impact resistance	Pass 2,5 Joules reverse & direct (20 in lb)	ISO 6272-2 (d/r)

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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	Suitable for outdoor use	

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

For application on Buildings we recommend using our Interpon D series.

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

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

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