

Product Data Sheet

AkzoNobel Powder Coatings

Interpon 100

Product Description

Interpon 100 is a series epoxy based powder coatings that exhibit excellent corrosion protection and chemical resistance when applied over a properly prepared metal substrate.

Interpon 100 is designed for interior application only. **Interpon 100** powders are available in gloss, satin, matte and texture finishes in a wide range of colors.

Powder Properties

Chemical type	Epoxy
Density (g/cm³)	1.2-1.8 g/cm ³ depending on color and effect
Application	Suitable for electrostatic spray
Storage	Under dry, cool ($\leq 25^{\circ}\text{C}$) conditions (open boxes must be resealed)
Shelf life	12 months
Curing schedule	15 minutes at 180°C 10 minutes at 190°C 5 minutes at 200°C
	(a) For full matt powders add 5 minutes to the times. For high reactivity (HR) powders see overleaf

Test Conditions

The results shown below are based on mechanical and chemical tests which (unless otherwise indicated) have been carried out under laboratory conditions and are given for guidance only. Actual product performance will depend upon the circumstances under which the product is used.

Substrate	Gold Seal polished 0.5mm steel
Pretreatment	Gold Seal lightweight Zinc Phosphate
Film Thickness	50 microns
Curing Schedule (Object Temperature)	5 minutes at 200°C (object temperature)

Mechanical Tests

Adhesion	ISO 2409 (2mm crosshatch)	0
Flexibility	ISO 6860 (Conical Mandrel)	Pass 3 mm
Hardness	ISO 1518 (2000g)	Pass - no penetration to substrate
Erichsen Cupping	ISO 1520	$\geq 7\text{mm}$
Impact	ISO 6272-2	Pass 2,5 Joules reverse & direct (20 in lb)

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.

Salt Spray (250 hours)	ISO 9227	Pass - no corrosion creep more than 2 mm from scribe
Cyclic Humidity (1000 hours)	ISO 6270-1	Pass - no blistering or loss of gloss
Distilled Water Immersion (240 hours)	ISO 2812	Pass - no blistering or loss of gloss
Exterior Durability	Some chalking and loss of gloss after 3-6 months continuous outdoor exposure. Protective properties retained. Not recommended for outdoor applications.	
Chemical Resistance	Generally excellent resistance to most acids, alkalis and oils at normal temperatures.	

Pretreatment

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

Application

Interpon 100 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.

In all application processes the aspect obtained is subject to variation, depending on the method of application (type of gun, nozzle, etc) and the shape/type of component. We recommend that the actual application parameters are adapted and adjusted depending on the type of component and with each powder batch to give a finish in accordance with our color card.

The following procedure is given as a guideline when using these finishes. We recommend the use of flat jet spray nozzles. To ensure powder homogeneity, the complete content of the boxes should be emptied completely into the feed hopper. For manual application it is essential to ensure that an even film thickness is applied, and, in all instances, sinusoidal gun movements should be avoided.

All powders can show small color differences from batch to batch, this is normal and unavoidable. 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.

Bonded products have better application properties than blended products (more stable) but attention should still be paid to line settings to avoid "marble effect" and changes in aspect after recycling. For more details it is suggested to read the "**Metallic Application Guideline**".

Different substrates (Aluminium, steel, galvanized steel, etc.), 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 color and gloss.

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.
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Additional information **Interpon 100 HR** (High Reactivity) powders are also available for use where a lower curing temperature or shorter curing schedule is required.

Sales code	B-Series
Curing schedule	30 minutes at 130°C (object temperature) 15 minutes at 150°C 5 minutes at 180°C
Shelf life	6 months

For further details on powder properties and film performance of Interpon 100HR please contact AkzoNobel.

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 **IMPORTANT NOTE:** The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product.

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