

Product Data Sheet

AkzoNobel Powder Coatings

Interpon 700 HR

Product Description

Interpon 700 HR (High Reactivity) is a series of epoxy polyester hybrid powder coatings offering improved colour, UV-light and heat stability compared to the Interpon 100 range of pure epoxies, whilst maintaining an optimum combination of decorative and protective qualities. Interpon 700 HR require lower stoving temperature or shorter curing schedule than standard Interpon 700 range.

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

Powder Properties

Chemical type	Epoxy Polyester
Density (g/cm³)	1.2-1.7 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	24 months
Curing schedule	15 minutes at 160°C 8 minutes at 180°C

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	polished steel
Pretreatment	Zinc Phosphate
Film Thickness	60-70 microns
Curing Schedule (Object Temperature)	8 minutes at 180°C

Mechanical Tests

Adhesion	ISO 2409 (2mm crosshatch)	Gt 0
Flexibility	ISO 1519	Pass 3 mm
Erichsen Cupping	ISO 1520	≤ 7 mm
Impact	ISO 6272	> 30 kg·cm direct

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 (500 hours)	ISO 9227	Pass - no corrosion creep more than 3 mm from scribe
Cyclic Humidity	ISO 6270 (1000 hours)	Pass - no blistering or loss of gloss
Distilled Water Immersion	ISO 2812 (240 hours)	Pass - no blistering or loss of gloss
Exterior Durability	Not recommended for outdoor applications. Some chalking after 6-12 months continuous outdoor exposure but less than pure epoxies. Protective properties not impaired.	
Chemical Resistance	Generally good resistance to most acids and 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 700 HR powder coatings can be applied by corona electrostatic equipment.

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.
------------------	---

Post Application
Contact with Chemical Agents

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.

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.

Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advices given are subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product.

Brand names mentioned in this data sheet are trademarks of or are licensed to AkzoNobel.

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

Copyright © 2021 Akzo Nobel Powder Coatings Ltd. Interpon is a registered trademark of AkzoNobel

Interpon 700 HR - Issue #2

Last Revision Date: 08.09.2021

Author: Como Lab