

# Product Data Sheet

## AkzoNobel Powder Coatings Interpon 700 AF

### Product Description

Interpon 700 AF powder coatings are part of the Interpon 700 range and maintain all of the film performance attributes of epoxy polyester chemistry but are designed to offer users significant improvements in their application characteristics. They can be sprayed on conventional equipment and are compatible with standard powders but give a more uniform coverage, and in particular give improved coverage in Faraday Cage areas. Powders are available in a range of colours in gloss and reduced gloss finishes, and are always custom matched to the user's requirements.

### Powder Properties

<b>Chemical type</b>	Epoxy Polyester
<b>Particle Size</b>	Suitable for electrostatic spray
<b>Specific gravity</b>	1.2-1.7 g/cm <sup>3</sup> depending on colour
<b>Storage</b>	Dry cool conditions below 30°C
<b>Shelf life</b>	24 months
<b>Stoving schedule <sup>(a)</sup></b> (object temperature)	15 minutes at 180°C 10 minutes at 190°C 6 minutes at 200°C

(a) For full matt powders add 5 minutes to times shown. 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.

<b>Substrate</b>	Gold Seal polished steel
<b>Pretreatment</b>	Gold Seal lightweight Zinc Phosphate
<b>Film Thickness</b>	50 microns
<b>Cure Schedule</b> (object temperature)	6 minutes at 200°C

### Mechanical Tests

<b>Adhesion</b> (2mm Crosshatch)	ISO 2409	Gt0
<b>Erichsen Cupping</b>	ISO1520	Pass >7mm
<b>Hardness</b> (2000gms)	ISO 1518	Pass - no penetration to substrate
<b>Impact</b>	BS3900-E3	Pass 2.5mm
<b>Flexibility</b> (Conical Mandrel)	ISO6860	Pass 3mm

### Chemical and Durability Tests

<b>Salt Spray</b>	ISO 7253 (250 hours)	Pass - no corrosion creep more than 2mm from scribe
<b>Cyclic Humidity</b>	ISO 6270-1 (1000 hours)	Pass - no blistering or loss of gloss
<b>Distilled Water Immersion</b>	ISO 2812 (240 hours)	Pass - no blistering or loss of gloss
<b>Exterior Durability</b>	Some chalking after 6-12 months continuous outdoor exposure but less than pure epoxies. Protective properties not impaired. Not recommended for outdoor applications.	
<b>Chemical Resistance</b>	Generally good resistance to most acids and alkalis and oils at normal temperatures.	

**Pre-treatment**

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 AF 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.

**Additional Information**

Interpon 700 AF 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 top coat is recommended when the coated article is to be subjected to physical or environmental damage. The top coat should ideally be applied within 2 hours of the metallic coating and gloves should be worn when handling the metallic coated articles.

For further details on the use of metallic powder coatings please contact AkzoNobel.

Interpon 700 AF HR (High Reactivity) powders are also available for use where a lower stoving temperature or shorter curing schedule is required.

<b>Stoving schedule</b>	15 minutes at 160°C
(object temperature)	8 minutes at 180°C
<b>Storage</b>	Dry cool conditions below 25°C
<b>Shelf life</b>	6 months

For further details on powder properties and film performance of Interpon 700 AF HR please contact AkzoNobel.

**Safety Precautions**

Please consult the Material Safety Datasheet (MSDS)

**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 fulfill 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.

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