

Product Data Sheet

AkzoNobel Powder Coatings

Interpon 700

Product Description

Interpon 700 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 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
Particle Size	Suitable for electrostatic spray
Specific gravity	1.2-1.7 g/cm ³ depending on colour
Storage	Dry cool conditions below 30°C
Shelf life	24 months
Stoving schedule ^(a) (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.

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

Mechanical Tests

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

Chemical and Durability Tests

Salt Spray	ISO 7253 (250 hours)	Pass - no corrosion creep more than 2mm from scribe
Cyclic Humidity	ISO 6270-1 (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	Some chalking after 6-12 months continuous outdoor exposure but less than pure epoxies. Protective properties not impaired. ⚠ Not recommended for outdoor applications.	
Chemical Resistance	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 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 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 700HR (High Reactivity) powders are also available for use where a lower stoving temperature or shorter curing schedule is required.

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

For further details on powder properties and film performance of Interpon 700HR 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.

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