

BU Powder Coatings

Interpon 610 - MN6052 610 R9005 SN80 25KG

Product Description

Interpon 610 is a series of polyester based powder coatings, formulated without the use of TGIC, designed for the exterior environment, offering excellent light and weather resistance from a single coat finish on a variety of substrates.

Interpon 610 powders are available in a wide range of colors in gloss, satin, matt, metallic and textured effects and can be custom matched to the user's requirements.

Powder Properties

Chemical type	Polyester
Particle Size	Suitable for electrostatic spray
Specific gravity	1.2-1.8 g/cm ³ depending on colour
Storage	Dry cool conditions below 30°C
Shelf life	24 months
Sales Code	M-series
Stoving schedule^(a) (object temperature)	15 minutes at 190°C 10 minutes at 200°C 8 minutes at 210°C

a) For high reactivity 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	Mechanical tests: Polished steel Chemical & durability tests: Pre-treated steel
Pretreatment	Zinc phosphate (or equivalent pre-treatment)
Film Thickness	60 microns
Stoving	10 minutes at 200°C (object temperature)

Mechanical Tests

Adhesion	ISO 2409-1992 (2mm crosshatch)	GT0
Erichsen Cupping	ISO1520	Pass >7mm
Hardness	ISO 15184 (2000gr)	Pass - no penetration to substrate
Impact	ISO 6272:1993	Pass 2.5 Joule D/R
Flexibility	ISO 1519:1973 (Cylindrical Mandrel)	Pass 3mm

Chemical and Durability Tests

Salt Spray	ISO7253 (500 hours)	Pass - no corrosion creep more than 3mm from scribe
Cyclic Humidity	ISO 6720-1:1998 (1000 hours)	Pass - no blistering or loss of gloss
Distilled Water Immersion	ISO 2812-2:1993 (240 hours)	Pass - no blistering or loss of gloss
Exterior Durability	Excellent - no chalking, slight loss of gloss after 12 months continuous exposure but no film breakdown or reduction in protective properties	
Chemical Resistance	Generally good resistance to acids, alkalis and chemical substances 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 (or equivalent pre-treatment) of ferrous metals improves corrosion resistance.

Aluminium substrates may require a chromate conversion coating (or equivalent pre-treatment)

Application

Interpon 610 powders can be applied by manual or automatic electrostatic spray equipment. It is

recommended that powder film thickness be between 60-110 microns. Unused powder can be reclaimed using suitable equipment and recycled through the coating system. For the metallics we suggest to avoid any recycling of powder. For "special effect" any variation in application (tribo / corona; voltage) can bring to differences in final finish. The actual application parameters must be adapted and adjusted depending on the type of components and with each powder batch in order to give a finish in accordance with our color standard.

Applications in the marine field

For marine applications, related to cycles approved RINA /MED, the thickness of the metal support must be $\geq 0.6\text{mm}$, and the thickness of the coating film must respect the value of $80\mu \pm 10\%$

Additional Information

Interpon 610 powders are available in bright aluminium finishes which are susceptible to scratching and finger marking. Protection by use of a clear polyester top coat is recommended when the coated article is to be subjected to physical damage or outdoor environments. Unprotected bright metallic finishes are prone to darkening in an outdoor environment. 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 Akzo Nobel.

Interpon 610 High Reactivity powders are also available in selected grades for use where a lower stoving temperature or shorter curing schedule is required.

Sales code: N-Series

Stoving schedule: 15 minutes at 160°C

(object temperature) 8 minutes at 180°C

Shelf life: 12 months

For further details on powder properties and film performance of **Interpon 610** High Reactivity please contact Akzo Nobel.

Safety Precautions

Please consult the Material Safety Datasheet (MSDS)

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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 advice 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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