

# Product Data Sheet

## AkzoNobel Powder Coatings Interpon 610 ML171K

### 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 colours in gloss, satin, matt, metallic and textured effects and can be custom matched to the user's requirements.

### Powder Properties

Color	N9.0(K)	
Gloss	40 ± 5 %	
Specific gravity	1.4 ~ 1.8	
Storage	24 month	
Shelf life	Dry cool conditions below 25 °C	
Stoving Schedule	(Object Temperature)	200 °C x 10 Min(M.T)

Each product can get the best quality when working under standard curing conditions, if you are working at low temperatures or promote curing conditions, etc., may cause slight variations in color. Please contact technical institute or department for more information

### Test Condition

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	0.6 mm EGI Panel	
Surface Pretreatment	KS M 5000 Test method 1111	Zinc Phosphate
Dry Film Thickness	60 ± 10 μm	
Cure Schedule	(Object temperature)	200 °C x 10 Min(M.T)

### Mechanical tests

Impact Resistance	ASTM D 2794	500g x 50cm, No Crack
Adhesion	ASTM D 3359	No Peeling
Cupping	KS B 0812 (Erichsen)	6 mm
Pencil Hardness	ASTM D 3363	Mitsu-Bishi F, No Scratch
Flexibility	ASTM D 522(Conical Mandrel)	4 mm

### Chemical Tests and Long term tests

Salt spray	ASTM B 117	240 hrs, < 2 mm
Humidity	ASTM D 1735	240 hrs, No Blister
Acid Resistance	5 % CH <sub>3</sub> COOH	24 hrs, No Change
Exterior Durability	ASTM G 154 (QUV)	200 hrs, G/R > 50 %

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**Substrate Pretreatment** For maximum protection, it is essential to pre-treat components prior to the application of Interpon 610. Pre-treatment of Interpon 610 is Aluminum, 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. Aluminum substrates may require a chromate conversion coating. Detailed advice should be sought from the pre-treatment supplier.

**Application** **Interpon 610** powder coatings can be applied by manual or automatic electrostatic spray equipment. Unused or over-sprayed powder coating can be reclaimed and recycled through the coating system. It can be applied at 70 to 90 kv for coating by electrostatic spray gun application. It should be reduced voltage for re-coating. Distance between spray gun and substrate is normally 15 to 25 cm, it can be changed depending on the shape of substrates. The required standard film thickness should be maintained for even quality. Over 80 % of total paint area has to be covered with average film thickness and excessive film thickness may cause the degradation. In the case of the flame type curing oven Gas used as a heat source, can reduce the incomplete combustion products, colors fade and re-coating properties depending on the concentration of acidic components in the oven. If even an indirect hot air drying above ingredients are introduced so that the same problem occurs, you may need to check periodically the status of the heat exchanger

**Additional information**

- Do not use after mixed other different product. It can be happened quality problem even through mixed same color, which is designed with different compositions.
- Follow fully standard curing schedule, it can be reduced chemical and physical properties as under-cured
- Maintain continuously the recommended film thickness and even application condition.
- Store powder coatings at dry cool conditions below 25 °C
- Use below 30% of recycled powder with virgin powder.  
It can be effected poor workability as you use excessive recycled powder.
- Metallic product can be damaged at alkali solution.

**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.

- When using, do not eat, drink, or smoke and breathe the dust or gas from insufficient ventilation.
- Wash immediately to use soap and water to remove material from skin. Avoid contact with skin
- Wash eye over 10 minutes as contacted on eye
- Manage not to be ignited with an electric spark or open flame.
- Maintain not exceed the dust explosion permissible concentration(20~70 g/m<sup>3</sup>).  
Dust collection equipment should be used which has provision for adequate explosion release.
- All equipment should be electrically earthed to prevent build up of static.

**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 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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