

Product Data Sheet

AkzoNobel Powder Coatings

Interpon PF

Product Description

Interpon PF is a series of TGIC Free Polyester based powder coatings designed for post forming after powder coating. It is designed to have good flexibility for bending and forming. These products are designed for the exterior environment, offering excellent long term light and weather resistance form a single coat finish on a variety of substrates.

Powder Properties*

Chemical type	Polyester
Particle size	Suitable for electrostatic spray
Specific gravity	1.4 - 1.7 depending on colours
Storage	Dry cool conditions (below 30°C)
Shelf Life	18 months
Sales code	T-Series
Stoving Schedule	10 mins at 190°C or 8 mins at 200oC or 5 mins at 210oC (Object temperature)

Typical specifications

AS3715-2002, AS4506

Film properties

Mechanical, chemical and durability tests carried out on chromate conversion coated aluminium panels. All tests were performed on panels coated with 50 -70 microns of a gloss finish powder coating stoved for 10 minutes at 200°C (metal temperature).
Reduced gloss finishes may show lower values for mechanical performance.

Mechanical Tests*

Flexibility	(Bend Test) AS1580 402.1	Pass 6mm
Adhesion	(2mm Crosshatch) AS1580 408.4	Classification 1 maximum
Cupping test	ISO 1520	Pass > 6mm
Pencil Hardness	AS1580 405.1	F - minimum
Reverse Impact	AS3715 Section 2.5.8	Pass 2.5Nm

Chemical Durability Tests*

Salt Spray	AS3715 Section 2.5.10	Pass 1000 hours - no corrosion creep more than 2mm from scribe
Humidity Resistance	AS3715 Section 2.5.7	Pass at 1000 hrs - no blistering or loss of adhesion
Distilled water immersion	BS3900-F7 at 40°C	Pass – no blistering or loss of gloss after 240 hours
Exterior durability	Excellent - pass AS3715 after 12 months continuous exposure with no film breakdown or reduction in protective properties.	
Colour stability	Excellent for continuous exposure up to 100°C.	

Pre-treatment

For optimum coating performance the following pre-treatment is recommended prior to the application of Interpon PF. The pre-treatment should be used in accordance with the supplier's recommendations.

A. Aluminium	Multistage chrome chromate or chrome phosphate
B. Galvanised Steel	Multistage zinc phosphate or chromate
C. Steel	Multistage zinc or iron phosphate

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Application

Interpon PF 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.

Additional Information

Guidelines for Post Forming

Any post forming bending or forming application after powder coating should be performed within one (1) month of Powder Coating. Any extrusion needed to be bent or formed after this time period should be re-evaluated for suitability for post forming. After this time period, re-stoving a powder coated extrusion piece in a powder coating oven should restore bending and flexibility properties. In cold conditions, it is recommended that the extrusion to be post-formed is preheated to approximately 40°C to improve post forming bending properties.

The recommended film thickness for post forming on the significant surface is 50 - 70 microns and no greater than 90 microns on the leading edge. Higher film thicknesses will result in poorer post forming flexibility.

AkzoNobel Pty Limited has a policy not to use lead or other heavy metal based pigments in our range of powder coatings. As a result of this policy, the use of bright and deep colours such as Yellows, Oranges and Reds are not recommended for severe outdoor exposure where long-term colour fastness is required.

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 AkzoNobel has provided to its customer. If for any reason a copy of the relevant health and safety data sheet is not immediately available the user should contact AkzoNobel to obtain a copy before using the product. Minimum safety precautions in dealing with all powder coatings are as follows. All dusts are respiratory irritants. Therefore, inhalation of the dust or of the vapors resulting from the cure should be avoided. Take steps to prevent skin contact, but should contact occur, wash skin with soap and water. In case of eye contact flush immediately with clean water and seek medical advice. Dust clouds of any finely divided organic material can be ignited with an electric spark or open flame. Dust and powder should not be allowed to build up on surfaces or ledges. 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. Users are recommended to follow the guidelines laid down in AS3754:1990, "Safe Application of Powder Coatings by Electrostatic Spraying".

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. Unless otherwise agreed by us in writing, any contract to purchase products referred to in this brochure and any advice which we give in connection with the supply of products are subject to our standard conditions of sale. The information contained in this data sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.

* Typical minimum specifications. Performance may vary slightly between individual products.

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