

Product Data Sheet

AkzoNobel Powder Coatings

Interpon D1050

Product Description

Interpon D1050 is a series of high durability powder coatings specifically formulated for use on architectural aluminium extrusions and components. Providing new levels of weathering resistance, **Interpon D1050 Premium** is designed to offer significantly higher gloss retention and resistance to colour change combined with maximum film integrity to ensure long term cosmetic and functional protection. **Interpon D1050** powder coatings are available in a selected range of colours and pearlescent effects in gloss, satin or matt finishes.

Powder Properties*

Chemical type	Polyester
Particle size	Suitable for electrostatic spray
Specific gravity	1.2 - 1.7 depending on colours
Storage	Dry cool conditions (below 30°C)
Shelf Life	24 months below 30°C
Sales code	G-Series
Stoving Schedule	15 mins at 190°C or 10 mins at 200°C or 8 mins at 210°C (Object temperature)

Typical specifications

AS3715, WANZ, AAMA2603

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*

Dry Adhesion	EN ISO 2409	Pass, no removal of film
Impact resistance	EN ISO 6272	Pass- 2.5 Nm, no removal of film after tape pull test
Indentation	EN ISO 2815 (Buchholz)	Pass
Cupping Test	EN ISO 1520	Pass – 5mm deformation
Bend Test	EN ISO 1519	Pass – 5mm mandrel

Chemical Durability tests

Salt Spray	EN ISO 9227	Pass 1000 hours - no corrosion creep more than 2mm from scribe
Humidity Resistance	DIN 50017	Pass at 1000 hrs - blister formation less than 2 (S2)
Boiling Water	AS3715 Section 2.5.11	Pass (pressure cooker)
Sulphur Dioxide	EN ISO 3231 (Kesternich)	Pass - no blistering, loss of gloss or discolouration.
Mortar Resistance	ASTM D3260	Pass
Exterior durability	3 years Florida exposure - Excellent performance, colour change (Delta E) less than prescribed values, gloss retention >30%.	
Colour stability	Excellent for continuous exposure up to 120°C.	

Pre-treatment

For optimum coating performance the following pre-treatment is recommended prior to the application of **Interpon D1050**. The pre-treatment should be used in accordance with the supplier's recommendations.

A. Aluminium	Multistage chrome chromate, chrome phosphate or chrome ⁶ -free
B. Galvanised Steel	Multistage zinc phosphate or chromate
C. Steel	Multistage zinc or iron phosphate

Application

Interpon D1050 powder coatings can be applied by manual or automatic electrostatic spray equipment. To ensure the highest consistency of metallic coatings the powder should always be applied from a fluidised hopper. Unused or over-sprayed powder coating can be reclaimed up to a maximum of 20% using suitable equipment and recycled through the coating system. Frequent, small additions of reclaim powder to the hopper are recommended. For mixed colours and certain special finishes, advice must be sought from Akzo Nobel as to the suitability or otherwise of the product for recycling.

Post Application

For specific processes of post coating such as bending, thermal break, cleaning etc., please inform an Akzo Nobel representative for review and provide guidance or support.

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When screen printing or the application of sealants is required, it is strongly recommended to conduct a preliminary trial to confirm material compatibility and ensure the desired performance standards are achieved.

Additional Information

Product performance warranties are available with the **Interpon D1050** range through accredited applicators.

- 15 year colour and film integrity warranty for Residential applications. (Up to 3 levels and complying with Classes 2.0.2, 2.0.3, 2.0.4 or 7.0 according to the New Zealand Building Regulations.)
- 10 year colour and film integrity warranty for Commercial applications

For further information on the available warranties and the applicable terms and conditions, please contact your local AkzoNobel sales office.

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. These products can be sourced from the Interpon TC General Industrial range.

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. Brand names mentioned in this data sheet are trademarks of or are licensed to AkzoNobel

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