

Product Data Sheet

AkzoNobel Powder Coatings

Interpon D1000 Excel™

Product Description

Interpon D1000 Excel™ is a new generation TGIC Free Polyester powder coating formulated on AkzoNobel proprietary resin technology. Interpon D1000 Excel™ is designed to produce a factory finish over correctly pretreated hot dipped galvanised (HDG) steel fabricated articles, alloy castings as well as extruded aluminium.

Interpon D1000 Excel™ is especially suitable for porous substrates and hence normally eliminates the need to degas prior to powder coating. Typical end uses include fencing and gates, lighting columns, pedestrian guardrails, traffic signposts, large base posts and other galvanised steel street furniture and fittings.

Interpon D1000 Excel™ exhibits a tougher cured film which provides superior damage resistance to packaging materials. Interpon D1000 Excel™ incorporates AkzoNobel patented Particle Management Technology providing outstanding powder application and enhanced recess penetration. Interpon D1000 Excel™ is designed to give excellent long term exterior durability and colour retention and is available in a limited range of colours and in gloss, satin and 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	18 months
Sales code	G-Series
Stoving schedule (object temperature)	8 mins at 190°C or 5 mins at 200°C or 4 mins at 210°C (Object temperature)

Typical specifications

AS3715, WANZ, AS4506, BS6496, BS6497, AAMA2603

Film properties

Mechanical, chemical and durability tests carried out on zinc phosphated galvanised steel 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 > 3mm
Pencil Hardness	AS1580 405.1	F - minimum
Reverse Impact	AS3715 Section 2.5.8	Pass 2.5Nm
Salt Spray	AS3715 Section 2.5.10	Pass 1000 hours - no corrosion creep more than

Chemical Durability tests

neverse impact	A007 10 06011011 2.0.0	1 033 Z.JIVIII	
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 120°C.		

Pre-treatment

For optimum coating performance, galvanised steel and aluminium require a multistage pre-treatment including either zinc phosphate or chromate. For particularly porous substrates, degassing at 5-10° C in excess of cure temperature prior to powder application is recommended.



Interpon D1000 Excel™

Application

Interpon D1000 Excel™ 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

Product performance warranties are available with the Interpon D1000 Excel™ range through accredited applicators. 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.

Interpon D1000 Excel™ powder coatings as supplied by AkzoNobel contain no organic solvents and can contribute toward satisfying the IEQ credits in the following Green Star® rating tools:

IEQ11 Office Interiors v1.1 IEQ8 Education v1 IEQ13 Office Design v2 IEQ8 Retail Centre v1 IEQ13 Office As-Built v2 IEQ8 Healthcare v1 IEQ8 Multi Unit Residential v1 IEQ8 Industrial v1

Note: Products are not reviewed or certified under the Green Star® rating system. Green Star® credit requirements cover the performance of materials in aggregate, not the performance of individual products or brands. For more information on Green Star®, visit www.gbca.org.au.



green building council australia MEMBER 2014-2015

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

AkzoNobel Pty Limited AkzoNobel Coatings Ltd 51 McIntyre Road 686 Rosebank Road Avondale Auckland 1007 Sunshine Victoria 3020 New Zealand Australia Ph: 0800 801 342 Ph: 1800 630 516 Fax: 0800 809 679 Fax: 1800 650 786

Email: salesnz@interpon.com Email: salesoz@interpon.com Web: www.interpon.co.nz Web: www.interpon.com.au

Copyright © 2014 Akzo Nobel Powder Coatings Ltd. Interpon is a registered trademark of AkzoNobel Interpon D1000 Excel™ - Issue #004

Issued: Jun 2011

Interpon.