

Product Data Sheet

BU Powder Coatings

Interpon D1025 Gloss

Group Code Prefix L

The information given in this datasheet is generic for the range **Interpon D1025 Gloss**. Specific products within the range can vary from the generic. For these products individual product data sheets are available.

Product Description

The **Interpon D** series of powder coatings is specially formulated for use on architectural aluminium. Conforming to the performance requirements of SANS 1578: 2003 and Qualicoat class 1 specifications, **Interpon D1025** is designed for the exterior environment, giving excellent durability, weather resistance and colour retention from an easy to apply single coat finish. **Interpon D** powders are available in a wide range of RAL and house shades, other shades can be custom matched upon request.

Powder Properties:

	Result	Method
Chemical type	Polyester	
Colour	Wide range available	
Gloss	>75% (60° head)	ASTM D523-89
Specific Gravity	1.2-1.9g/cm ³ depending on colour	Theoretical
Particle size		Suitable for electrostatic spray
Storage		Dry cool conditions below 25°C
Shelf Life		24 months below 30°C peak temperature 12 months below 35°C peak temperature
Sales Code	L Series	

Test Conditions

The test 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	Aluminium	
Pre-treatment	Chromate	
Film Thickness	60 – 70 microns	ISO2360
Stoving (object temperature)	10 minutes at 200°C	

Mechanical Chemical and

Dry Adhesion	Pass GT-0	ISO2409 (2mm Crosshatch)
Dry Film Hardness	Pass >80	ISO2815 (Buchholz)
Impact	Pass 2.0mm direct & reverse	ASTM D2794
Flexibility (conical mandrel)	Pass 3mm	ISO 6860

Chemical and Durability Tests

Salt Spray	Pass – no corrosion creep more than 3mm from scribe	ASTM B117 (500 hours)
Acetic Acid Salt	Pass at 1000 hours <16 mm ² corrosion/10cm	ISO9227
Cyclic Humidity	Pass - no blistering or loss of gloss	DIN 50017 (1000 hours)
Sulphur Dioxide	Pass 30 cycles – no blistering, creep <1mm from scribe	ISO3231 (Kesternich)
Permeability	Pass – no defect after 1 hour	Qualicoat 2.16
Chemical Resistance	Generally good resistance to most acids, and oils at normal temperatures	
Exterior Durability	Excellent – no chalking, slight loss of gloss after 12 months exposure but no film breakdown or reduction in protective properties.	
Colour stability at elevated temperatures	Excellent for continuous exposure up to 150°C	

Pre-treatment

For maximum protection it is essential to pre-treat architectural components prior to the application of **Interpon D**. Aluminium components should receive a full multi-stage chromate conversion coating or suitable chrome-free pre-treatment to clean and condition the substrate.

Galvanised steel also requires multi stage pre-treatment using either zinc phosphate or chromate conversion. Degassing of galvanised steel prior to powder application is considered mandatory – follow the procedural advice of the pre-treatment supplier.

Interpon D1025 products may also be used on mild steel fabrications for non-architectural applications. Zinc or iron phosphate pre-treatment is nevertheless regarded as essential for improving corrosion resistance.

Detailed advice should be sought from the pre-treatment supplier

Application

Interpon D1025 Gloss can be applied by manual or automatic corona spray equipment. For solid shades unused powder can be reclaimed using suitable equipment and recycled through the coating system. For mixed colours and certain special effect finishes, advice must be sought from the manufacturer as to the suitability or otherwise of the product for recycling. Certain special effect finishes may not be suitable for recycling. For all mixed colour/special effect systems, advice must be sought as to the correct mixing ratio for virgin /reclaim powder.

For manual application it is essential to ensure that an even film thickness is applied and in all instances sinuous gun movements should be avoided.

It is considered standard practice in the industry where colour or finish accuracy is vital, to prepare a test panel of the proposed colour using the supplied coating with the coating/curing facilities that will be used to complete the job so as to ensure satisfaction before commencing the job.

Curing

Convection oven cure window: 20 minutes at 180°C; 15 minutes at 190°C;
10 minutes at 200°C; 7 minutes at 210°C.

In an oven that has infra-red elements the cure time may be shorter, please refer to our technical department for guidance.

Note! Cure temperatures given refers to the substrate temperature.

The flow of the coatings can be affected if the cure temperature rises too slowly.

Over baking can cause yellowing of lighter colours

Recycling

Unused powder can be reclaimed using suitable equipment and recycled through the coating system. However, due to the nature of the product, care should be taken, by means of sprayouts, to ensure that reclaimed powder has good colour and gloss uniformity as well as consistency of finish when compared to original virgin material.

It is important to ensure that the powder is not contaminated with any other powder, as the contaminant will show up as specks in the coating finish.

Recommended film thickness

Depending on colour 60-70 microns, however due to the limited opacity of certain bright colours – (yellows; oranges and clean reds) it is necessary to apply a higher film thickness, this would vary with each colour and could require up to 100µm for coverage.

Please contact our technical service department for more information.

Safety Precautions

Please consult the product specific Material Safety Datasheet.

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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 fulfil 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 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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