

Product Datasheet



AkzoNobel
Tomorrow's Answers Today

BU Powder Coatings

Interpon D1036 Metallic

Code: SW240F D1036 MX MIC RAL 1035 BOND

Product Description

Interpon D1036 Metallic is a range of powder coatings intended for use on architectural aluminium and galvanised steel. Available in a wide stock range **Interpon D1036 Metallic** has been specifically formulated without the use of TGIC. As part of the **Interpon D** series of architectural powders, **Interpon D1036 Metallic** gives excellent exterior durability and colour retention and conforms with the requirements of all the major European architectural finishing standards.

Interpon D1036 stabilized metallic(AS-BOND) powders share the properties of standard **Interpon D1036** powders, but compared to conventional metallic and special effect powders, **Interpon D1036 Metallic AS-Bond** grade products have improved reproducibility between different application conditions, and improved colour stability, gloss and finish effect even after recycling.

The **AC** version (Advanced Cavity) improved coverage in Faraday Cage areas.
The **AF** version (Advanced Fluidity) improved flow for application process.

All **Interpon D1036 Metallic** powders are formulated to meet fully the requirements of BS6496:1984, BS6497:1984, Qualicoat Class 1 and GSB.

Powder Properties

Chemical type	Polyester
Particle size	Suitable for electrostatic spray
Specific gravity	1.2-1.9 g/cm ³ depending on colour
Storage	Dry cool conditions below 35°C and in a sealed box
Shelf life	24 months below 30°C peak temperature 12 months below 35°C peak temperature
Stoving schedule (object temperature)	Matt : 15-30 minutes at 180°C : 12-24 minutes at 190°C : 10-20 minutes at 200°C Gloss/Satin : 20-40 minutes at 170°C : 10-20 minutes at 180°C : 8-16 minutes at 200°C : 4-10 minutes at 210°C

Test Conditions:

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	Aluminium (0.5-0.8mm Al Mg1)
Pretreatment	Chromate
Film Thickness	60-80microns
Stoving	10 minutes at 200°C (object temperature)

Mechanical Tests

Adhesion	ISO2409 (2mm Crosshatch)	Gt 0
Erichsen Cupping	ISO1520	Pass>5mm
Hardness	ISO2815	Minimum 80
Impact	ASTM D2794 and	Pass 2.5 joules reverse & direct or 20 inch pounds
Flexibility	ISO1519	Pass 5mm

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Corrosion Tests	Salt Spray	ISO 7253	Pass at 1000 hours – no corrosion area more than 2mm from scribe
	Acetic Acid Salt	ISO9227	Pass at 1000 hours <16 mm ² corrosion/10cm
	Constant Humidity	ISO6270	Pass at 1000 hours - no blistering Creep <1mm from scribe
	Sulphur Dioxide	ISO 3231	Pass 30 cycles – no blistering, creep <1mm from scribe
	Permeability	Pressure Cooker EN12206-1:2004 Part 5.10	Pass – no defects after 1 hour (2 hours boiling water)
	Chemical Resistance	Generally good resistance to acid, alkalis and oils at normal temperatures	
	Mortar Resistance	EN12206-1:2004 Part 5.9	No effect after 24 hours

Weathering Tests	Exterior Durability	ISO2810 (Florida 12 months 5° south)	≥50% Gloss retention. Colour retention in accordance with GSB or Qualicoat Chalking – none in excess of minimum in ASTM D659:1980
	Accelerated Weathering Test	Suntest Original – Hanau-Quartzlampen ISO11341 QUV B313	≥50% Gloss retention after 1000 hours
	Light Fastness	DIN54004	≥50% Gloss retention after 300 hours Minimum 7

Pretreatment

For maximum protection it is essential to pretreat architectural components prior to the application of $\alpha\beta\gamma\delta$ **D1036 Metallic**. Aluminium components should receive a full multi-stage chromate conversion coating, suitable chrome-free pre-treatment or suitable pre-anodising to clean and condition the substrate. Detailed advice should be sought from the pre-treatment supplier.

Galvanised steel requires surface preparation by either multi-stage pretreatment using either zinc phosphate or chromate conversion or controlled sweep blasting. Depending on the type of galvanizing, degassing or use of anti-bubbling additives may be required – follow the procedural advice of the pre-treatment supplier.

$\alpha\beta\gamma\delta$ **D1036 Metallic** products may also be used on cast or mild steel.

For outdoor use $\alpha\beta\gamma\delta$ **PZ** or **APP120** anti-corrosive primer over a correctly prepared substrate is recommended.

Application:

Interpon D1036 Metallic powders can be applied by manual or automatic electrostatic spray equipment with fluidised bed application system. The actual application parameters must be adapted and adjusted depending on the type of components and with each powder batch in order to give a finish in accordance with our colour standard.

The following procedure is given as a guideline when using a corona electrostatic spray equipment with fluidised bed application system:

Gun voltage: 70-80KV

Nozzle type: flat jet

Transportation air : 2-2,5 Bar

Transportation powder : 1,5-2 Bar

We recommend to contact Akzo Nobel Coatings S.p.A. for tribostatic spray products.

The use of direct box feed equipment may not reproduce fully the finish of our colour standard. To ensure powder homogeneity, empty the boxes totally into the tray or feed hopper. Only one spray run and one batch should be used for components that are going to be simultaneously visible following assembly/fabrication. For manual application it is essential to ensure that an even film thickness is applied.

This product may be recovered and recycled on most common equipment subject to normal controls on rations of recycled to virgin powder. Recycling is not recommended for metallic product non stabilized, Akzo Nobel should be consulted for specific recommendations on recycle rations for this product, but in any circumstances the recycled/virgin ratio should not exceed 1/5.

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Post Application

For specific advice on the suitability of post coating processes such as bending or the use of sealants, adhesives, thermal break, cleaning, etc. please consult Akzo Nobel

Safety Precautions

Please consult the Material Safety Datasheet (MSDS)

FOR PROFESSIONAL USE ONLY

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 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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