

Product Datasheet



AkzoNobel
Tomorrow's Answers Today

BU Powder Coatings

Interpon D1036 LSA (Low Solar Absorption)

Product Description

The **Interpon D1036 LSA** series (sometimes referred to as Cool Coatings) of powder coatings is specially formulated for use on architectural aluminium and galvanized steel. Conforming with the performance requirements of the British Standards (EN12206 and EN13438), AWA (1976) and Qualicoat specifications **Interpon D1036 LSA** powders are available in a wide range of RAL and BS shades in Gloss, Satin and Matt finishes, texture and metallic effect.

Interpon D1036 LSA are supplied under the relevant Qualicoat Class 1 and GSB requirements, e.g. Interpon D1036 Gloss LSA is sold under the same license as Interpon D1036 Gloss.

Powder Properties

Chemical type	Polyester
Particle Size	Suitable for electrostatic spray
Gloss	0-100
Specific gravity	1.2 – 1.9 g/cm ³
Storage	Dry, cool conditions below 25 °C
Shelf life	12 months
Sales Code	Various
Stoving schedule (object temperature)	15 minutes at 190°C 10 minutes at 200°C 8 minutes at 210°C 4-10 minutes at 210°C – typical, but check for specific products

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
Pretreatment	Chromate
Film Thickness	60 microns
Stoving	10 minutes at 200°C (object temperature)

Mechanical Tests

Adhesion	ISO2409 (2mm Crosshatch)	Pass Gt 0
Erichsen Cupping	ISO1520	Pass >7mm
Hardness	ISO1518	Pass – no penetration to substrate
Impact	ASTM D2794	Pass 2.5 joules reverse & direct
Flexibility	ISO6860 (Conical Mandrel)	Pass 3mm

Chemical and Durability Tests

Salt Spray	ISO 7253	Pass at 1000 hours - no corrosion area more than 2mm from scribe
Acetic Acid Salt Spray	ISO9227	Pass at 1000 hours <16 mm ² corrosion/10cm
Constant Humidity	ISO6270	Pass at 1000 hours - no blistering, or loss of gloss
Distilled Water	ISO2812-1	Pass – no blistering or loss of gloss after 240 hours
Sulphur Dioxide	ISO3231	Pass 30 cycles – no blistering, creep <1mm from scribe
Chemical Resistance	Generally good resistance to acid, alkalis and oils at normal temperatures	
Exterior Durability	ISO2810 Clause 4.10 12 months Florida 45°S	Excellent performance. Slight even loss of gloss no checking, cracking or flaking. Chalking – none in excess of minimum in ASTM D659:1980
Colour Stability at elevated temperatures		Excellent

Solar reflective properties

ISO 9050: 2003 –CIE 130: 1998

INCREASE OF SOLAR REFLECTANCE	
COLOUR	%INCREASE SR
WHITE	8%
RED	55%
BLU	109%
GREEN	282%
BLACK	400%
ALLUMINIUM METALLIC	44%

Pretreatment

For maximum protection it is essential to pretreat components prior to the application of **Interpon D1036LSA**. Aluminium components should receive a full multi-stage chromate conversion coating or suitable chrome-free pre-treatment 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. Degassing of galvanized steel prior to powder application is considered mandatory – follow the procedural advice of the pretreatment supplier.

Interpon D1036 LSA products may also be used on mild steel fabrications for non-architectural applications, nevertheless zinc phosphate pretreatment is regarded as essential

Application

Interpon D1036 LSA can be applied by manual or automatic electrostatic spray equipment. For solid shades unused powder can be reclaimed using suitable equipment and recycled through the coating system. Detailed information and specific advice for special finishes is available upon request. Certain colours should be applied at higher film thickness to ensure coverage.

D1036 LSA Metallic AS effect powders must be applied by conventional electrostatic or tribostatic spray equipment using the application parameters given below:

- fluidising air pressure 0.4-1.0kg/cm²
- transport air pressure 0.4-0.8kg/cm²
- additional air pressure 0.4-0.8kg/cm²
- voltage 40-60kV

The actual application parameters must be adapted and adjusted depending on the type of component and with each powder batch in order to give a finish in accordance with our colour standard.

The shade and appearance may be subject to variation according to the method of application (type of gun – electrostatic or tribostatic, nozzle, pot, etc

The use of direct box feed equipment (pressurised pot or vibrating sieve) cannot reproduce fully the finish on Our colour standard.

The following procedure is given as a guideline when using these finishes:

- We recommend the use of flat jet spray nozzles.
- To ensure powder homogeneity empty the boxes totally into the tray or feed hopper.
- Only one spray run and one batch of powder should be used for components going on the same building.
- For manual application it is essential to ensure that an even film thickness is applied and in all instances sinusoidal gun movements should be avoided.

For unused powder can be reclaimed upto a maximum of 30%, using suitable equipment and recycled through the coating system.

Interpon D1036 LSA

Additional Information Interpon D1036 LSA powder coatings are also available in qualities conforming to the German GSB quality standard and performance specification. For full details of all approved products please contact Akzo Nobel

Safety Precautions When using do not eat, drink or smoke. Do not breathe the dust. In case of insufficient ventilation wear suitable respiratory equipment. For further information please refer to the specific product Material Safety Data Sheet (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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