

# Product Data Sheet

## AkzoNobel Powder Coatings

### Interpon D1036 Low-E Satin

#### Product Description

**Interpon D1036 Low-E Satin** is a range of powder coatings intended for use on architectural aluminium and galvanized steel. **Interpon D1036 Low-E Satin** has been specifically formulated without the use of TGIC.

As part of the **Interpon D 1036** series of architectural powders, **Interpon D1036 Low-E Satin** gives excellent exterior durability and colour retention and conforms to the requirements of all the major European architectural finishing standards. All **Interpon D1036 Low-E Satin** powders are lead-free and meet the requirements of Qualicoat Class 1, EN12206, and EN13438 (formerly BS6496 &BS6497).

**Qualicoat License Number:** P-1957 (Italy)

#### Powder Properties

<b>Chemical type</b>	Polyester
<b>Appearance</b>	Smooth satin
<b>Gloss level (EN ISO 2813 (60°))</b>	65-75 gloss
<b>Specific gravity</b>	1.2-1.9 g/cm <sup>3</sup> depending on colour
<b>Particle Size</b>	Suitable for electrostatic spray
<b>Storage</b>	Dry cool conditions below 30°C ( <i>open boxes must be resealed</i> )
<b>Shelf life</b>	24 months below 30°C 12 months below 35°C
<b>Curing schedule (at object temperature)</b>	25-40 min at 150°C 15-30 min at 160°C 5-20 min at 180°C

#### Mechanical Tests

<b>Flexibility</b>	ISO 1519 (cylindrical Mandrel)	Pass 5mm
<b>Adhesion</b>	ISO 2409 (2mm crosshatch)	Gt0
<b>Erichsen cupping</b>	ISO 1520	Pass >5mm
<b>Impact resistance</b>	ISO 6272-2	Pass 2,5 Joules (reverse & direct (20 in lb)
<b>Buchholz Hardness</b>	ISO 2815	>80

#### Environmental and Durability Tests

<b>Acetic acid salt spray</b>	ISO 9227	<16 mm <sup>2</sup> corrosion/10cm, 1000 hours
<b>Constant humidity</b>	ISO 6270-2	No blistering, creep <1mm (1000 hours)
<b>Sulphur Dioxide</b>	ISO 22479	Pass 24 cycles – no blistering, gloss loss or discoloration

<b>Permeability</b>	EN12206-1 Par. 5.10	Pressure Cooker – pass 1 hour no defects
<b>Chemical Resistance</b>	Generally good resistance to acid, alkalis and oil at room temperatures	
<b>Mortar Resistance</b>	EN12206-1	No effect after 24 hours
<b>Accelerated Weathering</b>	ISO16474-2 (1000 hrs) ISO11507 QUV B 313 (300 hrs)	Gloss retention $\geq$ 50%
<b>Exterior durability</b>	ISO2810 (1 year)	$\geq$ 50% gloss retention, Colour retention accords with GSB/Qualicoat Chalking – none in excess of minimum in ASTM D4214-07
<b>Test Conditions</b>	Testing has been determined under laboratory conditions using the following application properties and is for guidance only.	
	<b>Substrate</b>	Aluminium (0.5-0.8 mm Al Mg1)
	<b>Pretreatment</b>	Chrome free Qualicoat/GSB approved pretreatment
	<b>Film thickness</b>	60 – 80 microns
	<b>Cure schedule</b>	25 minutes at 150°C (object temperature)
	Actual film performance will depend on the individual circumstances in which the product is used.	
<b>Pre-treatment</b>	For maximum protection it is essential to pretreat components prior to the application of <b>Interpon D1036 Low-E Satin</b> .	
	Aluminium components should receive a full multi-stage chromate conversion coating or 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 pretreatment supplier.	
	<b>Interpon D1036 Low-E Satin</b> products may also be used on cast or mild steel. For outdoor use, <b>Interpon Redox PZ</b> anti-corrosive primer over a correctly prepared substrate is recommended.	
<b>Application</b>	<b>Interpon D1036 Low-E Satin</b> powders can be applied by manual or automatic electrostatic spray or tribo-charging equipment. For solid shades, unused powder can be reclaimed up to a maximum of 30% using suitable equipment and recycled through the system. Please consult AkzoNobel for further details as to the correct mixing ratio for virgin/reclaim powder.	
	<b>Interpon D1036 Low-E Satin</b> powders should be applied at minimum 60µm.	

All powders can show small colour differences from batch to batch, this is normal and unavoidable. While AkzoNobel take every precaution to minimize visible differences, this cannot be guaranteed. Applicators and fabricators are advised to use a single batch for parts that will be assembled together. Differences are more likely with special effect powders.

Bonded products have better application properties than blended products (more stable) but attention should still be paid to line settings in order to avoid “marble effect” and changes in aspect after recycling. A constant ratio between virgin and recycled powders should be fixed by the coater in order to achieve a consistent effect. For more details it is suggested to read the “**Metallic Application Guideline**”.

Different substrates (aluminium, steel, galvanized steel...), use of primer, and big changes in film thickness may give a different aspect.

Products with different codes should not be mixed even if same colour and gloss.

<b>Post Application</b>	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 AkzoNobel.
<b>Maintenance</b>	For specific advice on Cleaning and Maintenance please consult the Interpon D series <i>Cleaning and Maintenance Guidelines</i> available from AkzoNobel.
<b>Safety Precautions</b>	Please consult the Material Safety Datasheet (MSDS)
<b>Disclaimer</b>	<p><b>IMPORTANT NOTE:</b> 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 condition of the substrate or the many factors affecting the use and application of the product.</p>

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