Product Data Sheet

AkzoNobel Powder Coatings

Interpon D1036 Low-E Gloss

Product Description

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

As part of the **Interpon D 1036** series of architectural powders, **Interpon D1036 Low-E Gloss** 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 Gloss** powders are lead-free and meet the requirements of Qualicoat Class 1, EN12206, and EN13438 (formerly BS6496 &BS6497).

Qualicoat License Number: P-1938 (Italy)

Powder Properties	**Chemical type**	Polyester	
	Appearance	Smooth gloss	
	Gloss level (EN ISO 2813 (60°))	80-90 gloss	
	Specific gravity	1.2-1.9 g/cm^3 depending on colour	
	Particle Size	Suitable for electrostatic spray	
	Storage	Dry cool conditions below 30ºC *(open boxes must be resealed)*	
	Shelf life	24 months below 30°C 12 months below 35°C	
	Curing schedule (at object temperature)	25-40 min at 150°C 15-30 min at 160°C 8-20 min at 170°C	
Mechanical Tests	**Flexibility**	ISO 1519 (cylindrical Mandrel)	Pass 5mm
	Adhesion	ISO 2409 (2mm crosshatch)	Gt0
	Erichsen cupping	ISO 1520	Pass **>**5mm
	Impact resistance	ISO 6272-2	Pass 2,5 Joules (reverse & direct (20 in lb)
	Buchholz Hardness	ISO 2815	>80
Environmental and Durability Tests	**Acetic acid salt spray**	ISO 9227	<16 mm^2 corrosion/10cm, 1000 hours
	Constant humidity	ISO 6270-2	No blistering, creep <1mm (1000 hours)
	Sulphur Dioxide	ISO 22479	Pass 24 cycles – no blistering, gloss loss or discoloration

	Permeability	EN12206-1 Par. 5.10	Pressure Cooker – pass 1 hour no defects
	Chemical Resistance	Generally good resistance to acid, alkalis and oil at room temperatures	
	Mortar Resistance	EN12206-1	No effect after 24 hours
	Accelarated Weathering	ISO16474-2 (1000 hrs) ISO11507 QUV B 313 (300 hrs)	Gloss retention ≥50%
	Exterior durability	ISO2810 (1 year)	≥50% gloss retention, Colour retention accords with GSB/Qualicoat Chalking – none in excess of minimum in ASTM D4214-07
Test Conditions	Testing has been determined under laboratory conditions using the following application properties and is for guidance only.		
	Substrate	Aluminium (0.5-0.8 mm Al Mg1)	
	Pretreatment	Chrome free Qualicoat/GSB approved pretreatment	
	Film thickness	60 – 80 microns	
	Cure schedule	25 minutes at 150ºC (object temperature)	
	Actual film performance will depend on the individiual circumstances in which the product is used.		
Pre-treatment	For maximum protection it is essential to pretreat components prior to the application of **Interpon D1036 Low-E Gloss.** 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. **Interpon D1036 Low-E Gloss** products may also be used on cast or mild steel. For outdoor use, **Interpon Redox PZ** anti-corrosive primer over a correctly prepared substrate is recommended.		
Application	**Interpon D1036 Low-E Gloss** 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. **Interpon D1036 Low-E Gloss** 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.
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 AkzoNobel.
Maintenance	For specific advice on Cleaning and Maintenance please consult the Interpon D series *Cleaning and Maintenance Guidelines* available from AkzoNobel.
Safety Precautions	Please consult the Material Safety Datasheet (MSDS)
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 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. 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. Brand names mentioned in this data sheet are trademarks of or are licensed to AkzoNobel

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