

Collection Futura Interpon D36 Smooth & Metallic

Product Description: **Interpon D36 Smooth & Metallic** effects from **Collection Futura** are 23 powder coating finishes specifically formulated for use on architectural metal components.

The **Interpon D36** range of polyester powder coatings has been specifically formulated using the **Perform System**, Akzo Nobel's TGIC-free technology.

Interpon D36 Smooth & Metallic coatings give excellent exterior durability and colour retention and conform to the requirements of all the major European architectural finishing standards.

Interpon D36 powders are lead-free and meet the requirements of GSB, Qualicoat Class 1, and EN 12206 (formerly BS6496), BS6497:1984.

Smooth & Metallic finishes from **Collection Futura**:

Matt	: Annapurna SW213F	Atlante SW212F	Azzura SW217F
	Berry SW220F	Borneo SW219F	Bronze SW205F
	Canon SW209F	Cognac SW218F	Cuivre SW206F
	Gobi SW211F	Horn SW215F	Manganese SW204F
	Marron d'inde SW208F	Patagonia SW216F	Petrol SW225F
	Platine SW203F	Pyrite SW207Z	Silver SW206Z
	Syrah SW214	Tundra SW210F	
Satin	: Acier SW161D	Galet SX100F	
Gloss	: Baltic SW001F		

Powder Properties:

Chemical type	Polyester
Gloss (60°) ISO2813	<i>Matt</i> : 20-36 <i>Satin</i> : 60-80 <i>Gloss</i> : 70-90
Particle size	Suitable for electrostatic & tribostatic application
Density	1.4-1.8 depending on colour
Storage	Dry cool conditions below 30°C peak temperature
Shelf life	<i>Matt</i> : 18 months <i>Gloss/Satin</i> : 24 months
Stoving schedule (object temperature)	<i>Matt</i> : 15-30 minutes at 180°C : 12.5-25 minutes at 190°C : 10-20 minutes at 200°C : 8-16 minutes at 210°C <i>Gloss/Satin</i> : 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 microns
Stoving	<i>Matt</i> : 10 minutes at 200°C (object temperature) <i>Gloss/Satin</i> : 8 minutes at 200°C (object)

Mechanical Tests:

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

Corrosion Tests:

Salt Spray	ISO7253	Pass at 1000 hours - no corrosion area more than 2mm from scribe
Acetic Acid Salt Spray	ISO9227	Pass at 1000 hours - <16mm ² corrosion/10cm
Constant Humidity	ISO6270	Pass at 1000 hours - no blistering, creep < 1mm

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	Sulphur Dioxide	ISO3231	Pass 30 cycles - no blistering, creep <1mm from scribe
	Permeability	Pressure Cooker Qualicoat B1(o)	Pass - no defects after 1 hour (2 hours boiling water)
	Chemical Resistance		Generally good resistance to dilute acids, alkalis and oils at normal temperatures
	Mortar Resistance	ASTM C207	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 ≥50% Gloss retention after 300 hours
	Light Fastness	DIN54004	Minimum 7

Pretreatment: For maximum protection it is essential to pretreat architectural components prior to the application of **Interpon D36 Smooth & Metallic**. Aluminium components should receive a full multi-stage chromate conversion coating, suitable chrome-free pretreatment or suitable pre-anodising to clean and condition the substrate. Detailed advice should be sought from the pretreatment 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 galvanising, degassing or use of anti-bubbling additives may be required - follow the procedural advice of the pretreatment supplier.

Interpon D36 Smooth & Metallic products may also be used on cast or mild steel. For outdoor use **Interpon PZ** anti-corrosive primer over a correctly prepared substrate is recommended.

Application: **Interpon D36 Smooth & Metallic** 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.

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) PC111

Disclaimer: The information given in this sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this 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. Whilst we endeavour to ensure that all advice we give about the product (whether in this sheet or otherwise) is correct we have no control over either the quality or condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of the use of the product. The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.