

Technical data sheet

Date	: 23/01/2015
Product name	: Interpon D2525 Structura
Code	: (Generic sheet for the series)
Color	:
Product Description	: Interpon D2525 Structura is a series of ultra-durable powder coatings specifically formulated without TGIC, with a fine textured aspect, intended for use on architectural aluminium and galvanized steel. Providing new levels of weathering resistance Interpon D2525 Structura surpasses the performance of leading architectural powders. It offers significantly higher gloss retention and resistance to colour change combined with maximum film integrity to ensure long term cosmetic and functional protection. These powder coatings are classified in Family I – class 6c under standard NFT 36-005. Interpon D2525 Structura meets the requirements of GSB Master, Qualicoat Class 2, EN 12206 (formerly BS6496), EN13438 (formerly BS6497:1984) and AAMA 2604-5. Some colours may not be available in Interpon D2525 Structura Following Ral shades are excluded from the Ral families for Qualicoat class 2: Ral 1003, 1012, 1018, 1028, 1033, 2004, 2011, 3015, 3017, 3018, 3020, 4001
Qualicoat Licence Number	P-0643 (France), P-0877 (Italy)
GSB Licence Number	183e (gloss 10)

Powder properties

Type	: Polyester
Gloss (EN ISO 2813 @ 60°)	: 5 – 15 gloss units
Specific gravity	: 1.2 – 1.9 g.cm ³ depending on colour
Particle size	: suitable for electrostatic spray
Stoving schedule (object temp)	: 25-45 minutes at 180°C 20-40 minutes at 190°C 12-24 minutes at 200°C 8-14 minutes at 210°C
Storage conditions	: Dry cool conditions below 30°C (open boxes must be resealed)
Shelf life	: 24 months below 30°C : 12 months below 35°C

Test Conditions

Substrate (Mechanical tests)	: Aluminium (0.5-0.8 mm Al Mg1)
Pretreatment:	: Chromate (DIN 50539)
Application method	: Electrostatic Spray
Cure schedule	: 8 minutes at 200°C (object temperature)12@200°C
Dry film thickness	: 60 – 80 micrometers
Testing condition	: 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.

Mechanical tests

Flexibility (cylindrical Mandrel)	: Pass Qualicoat Class 2 requirements	ISO 1519
Adhesion (2mm crosshatch)	: Gt0 (2mm crosshatch)	ISO 2409
Erichsen Cupping	: Pass Qualicoat Class 2 requirements	ISO 1520
Impact	: Pass Qualicoat Class 2 requirements	ASTM D2794
Buchholz hardness	: >80	ISO 2815

Chemical tests

Acetic acid salt spray	: <16 mm ² corrosion/10cm, 1000 hours	ISO 9227
Constant Humidity	: No blistering, creep <1mm (1000 hours)	ISO 6270
Sulphur Dioxide	: Pass 30 cycles – no blistering, gloss loss or discoloration	ISO 3231
Permeability	: Pressure Cooker – pass, 1 hour no defects	Blistering EN12206:2004
Chemical Resistance	: Generally good resistance to acid, alkalis and oil at normal temperatures	
Mortar resistance	: No effect after 24 hours	EN12206-1:2004
Exterior Durability	: Meets Qualicoat class 2 requirements after 3 years florida Meets AAMA 2604-5 requirements after 5 years Florida	ISO2810
Accelerated Weathering	: Gloss retention >90%	ISO 11341-1 (1000 hrs)
	: Gloss retention >50%	ISO11507:1997QUV B 313 (600 hrs)
Colour Stability at Elevated temperatures	: Excellent	

Substrate pre-treatment

For maximum protection it is essential to pretreat components prior to the application of **Interpon D2525 Structura**

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 D2525 Structura 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 D2525 Structura 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.

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.

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

Minimum once every 18 months, and up to every 3 months in aggressive atmospheres (further advice is available) or on the parts on which it is never raining. Use a solution of warm water and non-abrasive, pH neutral detergent solution. Surfaces should be thoroughly rinsed after cleaning to remove all residues. All surfaces should be cleaned using a soft cloth or sponge or nothing harsher than a soft natural bristle brush. Never use products as gasoline, acetone, alcohol, alkaline or acid products, and any abrasive generally. Never clean elements coated by means of high-pressure and/or high-temperature cleaners.

Safety Precautions

Please consult the Material Safety Datasheet (MSDS) available from AkzoNobel.

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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 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

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