

Technical Datasheet

INTERPON D2525 STRUCTURA FLEX



Superdurable polyester powder coatings with improved flexibility

Product description

Interpon D2525 Structura Flex, part of the Interpon D2525 Texture range, is a series of ultra-durable powder coatings with a sand-blasted aspect, specifically formulated without TGIC. It is intended for use on architectural Aluminium and galvanized steel.

Providing new levels of weathering resistance **Interpon D2525 Structura Flex** surpasses the performance of leading architectural powders. Interpon D2525 Structura Flex being superior to Interpon D2525 Structura, meets mechanical performance requirements of Qualicoat Class 1. It offers significantly higher gloss retention and resistance to color 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 durability requirements of GSB Florida 3, Qualicoat Class 2, EN 12206 (formerly BS6496), EN13438 (formerly BS6497:1984) and AAMA 2604 while meeting Qualicoat Class 1 flexibility requirements.

Some colors may not be available in Interpon D2525 Structura Flex.

Following RAL shades are excluded from the RAL families for Qualicoat class 2: Ral 1003, 1028, 1033, 2004, 2011, 3015, 3017, 3018, 4001.

Approvals

Qualicoat Approval	P-1879 (FR) P-2132 (TR) P-1796 (GB) P-1441 (CZ) P-1349 (AE) P-2149 (IT) under the brand name Interpon D2525 Texture
GSB Approval	183e (gloss 10)
Resistance to Fire Approval	Classification: A2,s1,d0 with film thickness up to 120 µm (generic polyester D1036, D2525) according to EN13501-1

Powder properties

	Typical value
Chemical Type	Polyester
Appearance	Fine Texture
Density	1.2 - 1.9 g/cm ³ , depending on colour
Gloss (60°)	3 - 7 GU
Shelf life	24 months below 30 °C 12 months below 35 °C
Storage Conditions	(open boxes must be resealed) Dry, cool conditions
Curing schedule	15 - 35 min at 180°C 12 - 25 min at 190°C 10 - 20 min at 200°C (object temperature)

<http://www.interpon.com/contact-us/>

Copyright © 2024 Akzo Nobel Powder Coatings Ltd. Interpon is a registered trademark of AkzoNobel

Revision Date: V5, 13.02.2025

Region: EMEA

AkzoNobel

Technical Datasheet

INTERPON D2525 STRUCTURA FLEX



Superdurable polyester powder coatings with improved flexibility

Pre-treatment

For maximum protection it is essential to pretreat components prior to the application of the powdercoating. 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. The 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

Powders can be applied by manual or automatic electrostatic spray equipment. This product should be applied at minimum 60µm. All powders can show small color differences from batch to batch, this is normal and unavoidable. 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. Products with different codes should not be mixed even if same colour and gloss. While AkzoNobel take every precaution to minimize visible differences, this cannot be guaranteed. For more information, it is suggested to read the Metallic Applications Guidelines.

Application Method	Electrostatic
Recycling	Please consult AkzoNobel for further details as to the correct mixing ratio for virgin/reclaim powder. For solid shades, unused powder can be reclaimed Unused powder can be reclaimed using suitable equipment and recycled through the coating system, but a minimum of 70% virgin powder should be used.

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.

Test conditions

The results are based on mechanical and chemical tests which (unless otherwise indicated) have been carried out under laboratory conditions and are given for guidance only
Testing has been determined under laboratory conditions using the following application properties and is for guidance only.

Pre-treatment	Chrome free Qualicoat/GSB approved pretreatment
Substrate	Aluminum (0.5-0.8 mm Al Mg1)
Curing schedule	15 min at 200°C (object temperature)
Film Thickness	70 - 90µm, ISO 2360

<http://www.interpon.com/contact-us/>

Copyright © 2024 Akzo Nobel Powder Coatings Ltd. Interpon is a registered trademark of AkzoNobel

Revision Date: V5, 13.02.2025

Region: EMEA

AkzoNobel

Technical Datasheet

INTERPON D2525 STRUCTURA FLEX

Superdurable polyester powder coatings with improved flexibility



Mechanical tests

	Typical value	Method/standard
Adhesion	Class 0	ISO 2409 (2 mm Crosshatch)
Erichsen cupping	Pass 5 mm	ISO 1520
Flexibility	Pass 5 mm	ISO 1519
Hardness	>80	ISO 2815 (Buchholz hardness)
Impact resistance	Pass 2,5 Joules reverse & direct (20 in lb)	ISO 6272-2 (d/r)

Chemical and durability tests

	Typical value	Method/standard
Chemical Resistance	Generally good resistance to acid, alkalis and oil at room temperatures.	
Sulphur Dioxide Resistance	Pass 24 cycles– no blistering, loss of gloss or discoloration	ISO 22479

Environmental and durability tests

	Typical value	Method/standard
Accelerated weathering	≥90% Gloss retention, 1000 h ≥50% Gloss retention, 600 h	ISO16474-2 ISO 16474-3 QUV B 313 (GSB)
Acetic acid salt spray	No blistering in excess of 2 (S2) according to ISO 4628-2. Infiltration <16 mm ² /10 cm, length of any single infiltration shall not exceed 3 mm., 1000 h	ISO 9227
Humidity	No blistering in excess of 2 (S2) according to ISO 4628-2; the maximum infiltration at the cross is 1 mm, 1000 h	ISO 6270-2 CH (Constant humidity)
Exterior durability	Chalking – none in excess of minimum in ASTM D4214 Meets Qualicoat class 2 requirements after 3 years of Florida exposure Meet AAMA 2604 requirements after 5 years of Florida exposure	ISO 2810
Mortar resistance	No effect after 24 hours	EN 12206-1
Wet adhesion	No sign of detachment or blistering. Cross-cut value 0. Qualicoat/GSB Colour change is acceptable.	

Maintenance

For specific advice on Cleaning and Maintenance, please consult the Interpon D series Cleaning and Maintenance Guidelines available from AkzoNobel.

<http://www.interpon.com/contact-us/>

Copyright © 2024 Akzo Nobel Powder Coatings Ltd. Interpon is a registered trademark of AkzoNobel

Revision Date: V5, 13.02.2025

Region: EMEA

AkzoNobel

Technical Datasheet

INTERPON D2525 STRUCTURA FLEX

Superdurable polyester powder coatings with improved flexibility



Safety Precautions

This product is intended for use only by professional applicators in industrial environments and should not be used without reference to the relevant health and safety data sheet which Akzo Nobel has provided to its customers.

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.

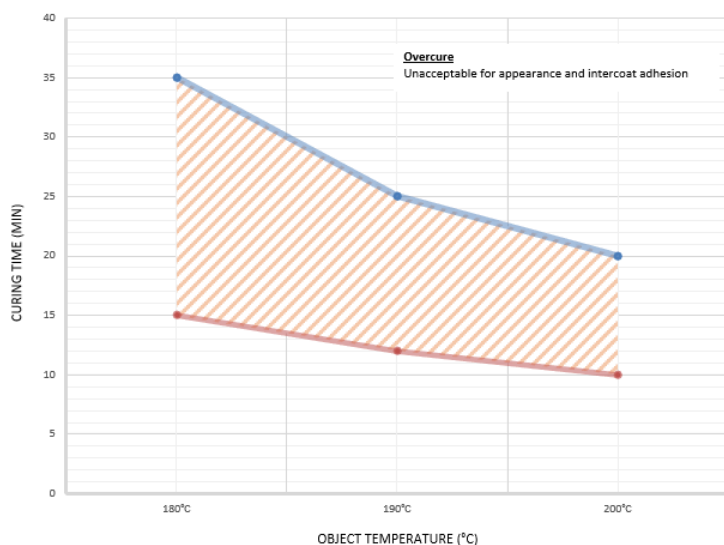
Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advices given are subject to our standard terms and conditions 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.

Appendix

Curing window

Interpon D2525 Structura Flex - curing window



Disclaimer:

The data contained in this Curing Window graph is obtained from laboratory coating trials under ideal curing conditions, and using perfectly prepared uncoated testing panels; consequently the curing window needs to be regarded as indicative only. To ensure the correct curing is achieved, specific thermal and performance checks should be

—●— Minimum cure

—●— Maximum cure

<http://www.interpon.com/contact-us/>

Copyright © 2024 Akzo Nobel Powder Coatings Ltd. Interpon is a registered trademark of AkzoNobel

Revision Date: V5, 13.02.2025

Region: EMEA

AkzoNobel