www.shjglass.com





Company Profile



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ABOUT US

Sharjah Metal Coating & Industries LLC. to cope up with the ever increasing demands of the industry. This Divisions is backed by a team of professionals, engineers, and skilled labours. The following works are done under their supervision, using both traditional and modern technology to ensure customers of high quality, good price and on-time delivery.

We are leading approved applicators for M/S. Jotun Powder Coatings, Norway. We offer the best job coatings for PE-EF and PE-SDF range that guarantees the highest quality at a very competitive price. All our pre-treatment chemicals are imported from M/s. Henkel KGAA, Germany. All the material coated by us has to go through a stringent quality testing by our fully equipped chemical testing laboratory.

We assure a tough, durable and anti-corrosive coating being one of the largest and oldest coating plants running with a total capacity of 11000 tonnes of aluminum coatings per annum from both our lines.



Company Profile:



Name Of Organization Sharjah Glass Store LLC

Date Of Estbalishment 1976

Address: P.O. Box: 1633, Sharjah, UAE:

Contact:

Glass & Trading Showroom:

Tel: +971 6 5686681

Factory:

Tel:+971 6 5422668

Email: shjglass@eim.ae

Website: www.shjglass.com

Sharjah Metal Coating & Ind. LLC

Main Factory: Ind. Area 13

Sharjah UAE

Tel: +971 6 5351585

Branch: Ind. Area 3

Sharjah, UAE

Tel: +971 6 5421968

Email: info@shjmetalcoating.com

No. Of Employees:

Management 8

Adminstration 10

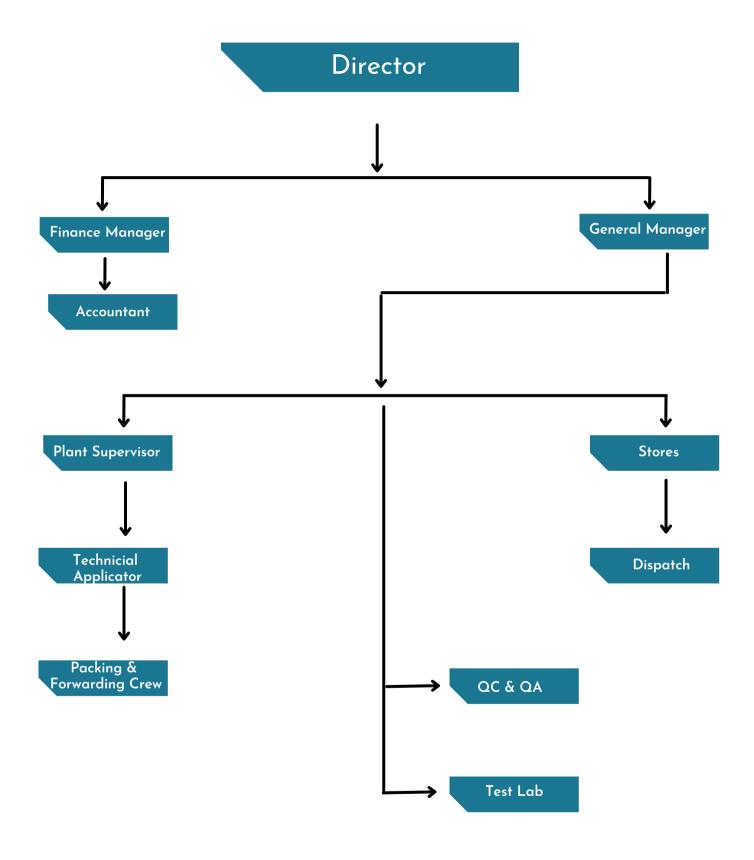
Skilled 40

Others 68

Organization Chart

Sharjah Metal Coating Ind. llc







POLICY STATEMENT

Sharjah Glass Stores LLC. is fully committed to being the leading provider of glass products & powder coatings.

A primary goal of Sharjah Glass is to achieve the highest standards of quality in all business units' practices and operations without compromise. Our objective is to continually improve our company performance, while offering our customers a safe, cost effective and professional service.

Quality performance is one of the cornerstones of our company culture, and is considered a personal responsibility of all employees. To maintain quality performance of all business units at the highest level, the following aims are pursued:

- To fulfill or exceed Customer needs and expectations by delivering a quality product in a consistent and timely manner;
- To cultivate and maintain the commitment to continual improvement and communicate our goals and objectives to every employee;
- To promote a working environment where training and tools are provided for all work to proceed in a safe and efficient fashion:
- To furnish a system of policies which are periodically reviewed to ensure the ability of all groups to perform their work effectively.
- To provide Quality Aluminium Product and Services to satisfy the customers by establishing proper training & developing strategic plan.



Our Quality Control Procedure

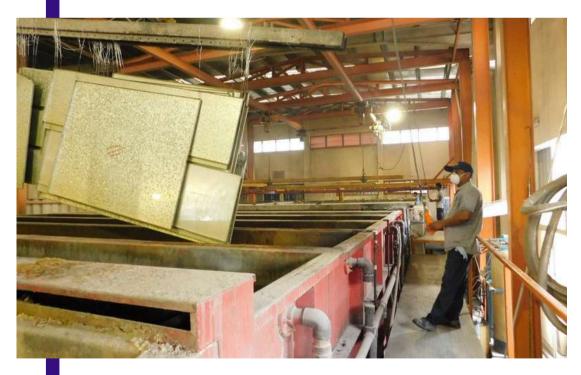
- 1- Color comparison: To insure the color matching with the reference samples.
- 2- Gloss test: According to ISO 2813 (using incident light 60 degrees), then compare the results with the required values.
- 3- Film thickness: According to the ISO 2360, this test is done by using film thickness gauge to ensure the film thickness is range of (60:90 microns)
- **4- Adhesion test:** According to ISO 2409, by using cross hatching cutter with 2mm blades gaps to insure the adhesion between powder and substrate surface.
- 5- Pencil hardness test: According to ISO 15184, by using pencils with various hardness values to insure scratching resistance.
- 6- Impact test: According to ISO 6267 by using impact tester to insure the coating resistance for impact action without failure.
- 7- Bending Test: According to ISO 6860, by using conical using conical mandrel to insure the flexibility of the coating when bending action happens.
- **8- Polymerization test:** By using solvents to insure the curing process fto the coating film.
- 9- * Resistance to humidity: to insure the humidity resistance for the coating by using special weather stimulator for 1000 hours.
- 10- * Salt spray test: by using salt spray cabinet for 1000 hours test period to insure media resistance for the coating.
- 11- Machu Test: Resistance to boiling water.
- * The Quality tests number 9 and 10 are made in JOTUN laboratory in Dubai.

FACTORY OVERVIEW





(JIGGING AREA)



(PRE TREATMENT)

FACTORY OVERVIEW





(HANGING MATERIAL FOR POWDER COATING)



(POWDER BOOTH)

FACTORY OVERVIEW





(PACKAGING)



(READY FOR DISPATCH)





Certificate of Approval

Sharjah Metal Coatings

is certified as an Approved Applicator to coat

Jotun Durasol

a product from Jotun Powder Coatings

This Company fulfils the requirements set by Jotun Powder Coatings for pre-treatment and application of powder coatings. These include having the necessary equipment, process controls and technical knowledge to comply with Jotun Powder Coatings' standards.

December 31, 2025 (Certificate valid until above date)

Authorised Signatory

Jotun Powder Coatings UAE (LLC)





Certificate of Approval

Sharjah Metal Coatings

is certified as an Approved Applicator to coat

Jotun SuperDurable

a product from Jotun Powder Coatings

This Company fulfils the requirements set by Jotun Powder Coatings for pre-treatment and application of powder coatings. These include having the necessary equipment, process controls and technical knowledge to comply with Jotun Powder Coatings' standards.

December 31, 2025 (Certificate valid until above date) Authorised Signatory

Jotun Powder Coatings UAE (LLC)





Certificate of Approval

Sharjah Metal Coatings

is certified as an Approved Applicator to coat

Jotun Facade

a product from Jotun Powder Coatings

This Company fulfils the requirements set by Jotun Powder Coatings for pre-treatment and application of powder coatings. These include having the necessary equipment, process controls and technical knowledge to comply with Jotun Powder Coatings' standards.

December 31, 2025

(Certificate valid until above date)

P.O.Box 51053 Outsit - U.A.E.

Authorised Signatory

Jotun Powder Coatings UAE (LLC)





AkzoNobel

Interpon D Approved Applicator



Interpon D1000 Series

SHARJAH METAL COATING INDUSTRIES L.L.C

Industrial 13, SHARJAH, U.A.E.

Is under AkzoNobel's tests and inspection regarding the pre-treatment, application, quality management standards and procedures, and verifying if complies with the requirements of the Architectural Range Approved Applicator schedule.

This certificate is effective from

16 Oct 2024 to 15 Oct 2025

Approved for Aluminium Alloys AA 6063

Approved for Pre-treatment Type Chrome-free

mellah.

Mustansar Billah

Technical Service Representative Powder Coatings – Middle East

Date: 16/10/2024

Certification number N° UAE44D1

AkzoNobel U.A.E. Paints L.L.C.





AkzoNobel

Interpon D Approved Applicator



Interpon D2000 Series

SHARJAH METAL COATING INDUSTRIES L.L.C

Industrial 13, SHARJAH, U.A.E.

Is under AkzoNobel's tests and inspection regarding the pre-treatment, application, quality management standards and procedures, and verifying if complies with the requirements of the Architectural Range Approved Applicator schedule.

This certificate is effective from

16 Oct 2024 to 15 Oct 2025

Approved for Aluminium Alloys AA 6063

Approved for Pre-treatment Type Chrome-free

called,

Mustansar Billah

Technical Service Representative Powder Coatings – Middle East

Date: 16/10/2024

Certification number N° UAE44D2

AkzoNobel U.A.E. Paints L.L.C.





SHARJAH METAL COATING & IND LLC

is certified as an Approved Applicator to coat

National Paints PE, PA 1000 SERIES & PS 2000 SERIES

Manufactured by:



We hereby certify that this company has the technical expertise, testing equipments and application facilities as per the standards set by National Paints Powder, Coatings.

Date: 01 - January - 2025

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SO SHIT, HART & HART CERTIFIED PACTORY

www.nationalpowder.com

SAMER. S. SAYEGE

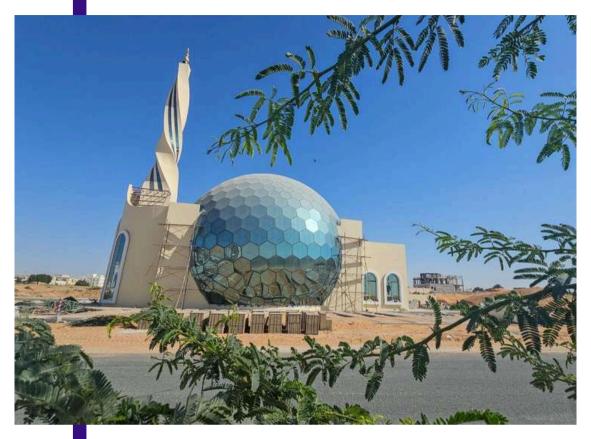
Managing Director

National Paints Powder Coatings











(MOSQUE-AL DHAID)





SHARJAH LAKE MOSQUE







JVC B4



HARRINGTON HOUSE





DUBAI HILLS ESTATE



ARABIAN RANCHES III





TOWN SQUARE DUBAI

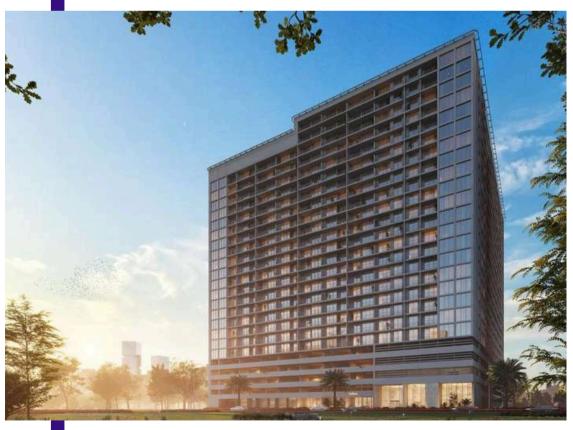


CITY WALK DUBAI





LUMA PARK 1



LUMA PARK 2





BELGRAVIA





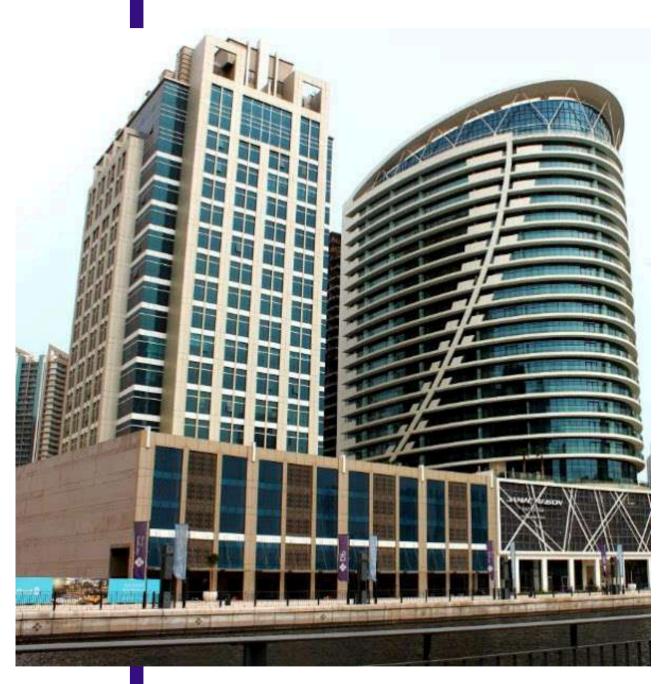
GATE TOWER SHARJAH





AL HIKMA





BAYS EDGE





DISTINCTION TOWER



DUBAI CLINIC





NMC HOSPITAL



PORSCHE SHOWROOM





SOBHA



DRAGON MALL

TECHNICAL DATA SHEETS



Technical Data Sheet Jotun Protects Property

Jotun Super Durable 2003

PRODUCT DESCRIPTION

This lead-free TGIC powder coating is specifically designed to meet stringent requirements of the construction industry. It provides longevity to the projects and building components by ensuring high levels of gloss retention, colour stability and corrosion protection along with aesthetic performance. This powder enables efficient application and provides uniform flow and attractive finish even after recycling.

Jotun Super Durable 2003 is formerly known as Corro-Coat PE-SDF 2003.

Application areas

These products are highly recommended to meet gloss retention and colour stability requirements. Primary areas of application are architectural aluminium extrusions and claddings.

When screen printing or sealants are used, it is advised to run separate trials to ensure compatibility and to meet the required performance criteria.

POWDER PROPERTIES

Storage

Keep in a dry cool area. Maximum temperature 25 °C. Maximum relative humidity 60 %. Under these mentioned conditions, product shelf life is 12 months from date of manufacture.

APPLICATION

Pretreatment

The overall performance of the coating system is largely dependent on the nature of the substrate and the type and quality of the pretreatment. For optimal results, it is recommended to follow the pretreatment supplier's instructions and recommendations.

The recommended types of pretreatment for the most frequently used substrates are:

Substrate Pretreatment
Aluminium Chromate conversion

Final rinse (deionized) The last running water from the object should be tested at 20 °C.

The readings obtained should measure below 30 µS/cm.

Suitable chrome-free pretreatment for aluminium is also recommended. Due to the variety of chrome-free pretreatments available today, only the approved systems from Qualicoat and GSB should be used. Detailed advice should be sought from the pretreatment supplier.

Curing

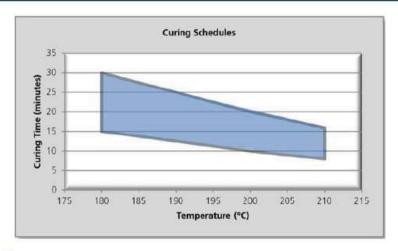
Date of issue: 19 July 2017 Page: 1/4



Technical Data Sheet Jotun Super Durable 2003



Page: 2/4



Equipment

Suitable for Corona or Tribo charging equipment.

APPEARANCE

Colour Selected range of RAL colours. This product is also available in the Cool Shades

Collection, a selection of colours with heat-reflective properties. Other colours can

be custom-made upon request.

Gloss EN ISO 2813 (60°) 35±7

If the significant surface is too small or unsuitable for the gloss to be measured with the glossmeter, the gloss should be compared visually with the reference sample (from the same viewing angle).

Gloss measurements of metallic effect coatings can show deviation from original levels specified in this document and visual comparison with the reference sample is recommended.

Gloss range used in TDS and on the label of the metallic effect coatings represents gloss of the base and not of the final finish.

PERFORMANCE

The technical data provided below are typical for this product when applied as follows:

Substrate Chromated aluminium panels

Substrate thickness (mm) 0.8 Film thickness (µm) 60-90

Typical values when tested.

Property	Standard	Result
Adhesion	EN ISO 2409 (2 mm)	Cross-cut rating Gt0 (100 % adhesion)
Impact resistance*	EN ISO 6272 /ASTM D2794 (impactor diameter 15.9 mm)	Passes 2.5 Nm without detachment after tape pull test.
Cupping test*	EN ISO 1520	Passes 2 mm indentation without cracking. Passes 5 mm indentation without detachment after tape pull test.
Flexibility*	EN ISO 1519	Passes 12 mm cylindrical Mandrel bend test without cracking. Passes 5 mm cylindrical Mandrel bend test without detachment after tape pull test.

Date of issue: 19 July 2017

This Technical Data Sheet supersedes those previously issued.



Technical Data Sheet Jotun Super Durable 2003



Film hardness	EN ISO 2815	Indentation resistance according to Buchholz: > 80
Mortar resistance	EN 12206-1	The mortar must be easy to remove without leaving any residues.
Drilling, milling and sawing test		No flaking of coating.
Neutral salt spray resistance	ASTM B117	No blistering or loss of gloss after 3000 hours
Humidity resistance containing SO ₂ .	EN ISO 3231 (0.2 I SO ₂)	No infiltration exceeding 1 mm on both sides of the scratch after 30 cycles.
Humidity resistance	EN ISO 6270-2	No infiltration exceeding 1 mm on both sides of the scratch after 3000 hours.
Acetic acid salt spray resistance	ISO 9227	After 1000 hours testing – maximum 16 mm² infiltration over a scratch length of 10 cm.
Accelerated weathering	DIN EN ISO 11507 (UVB - 313)	Cycle: 4 hours at 50 °C UV and 4 hours at 40 °C condensation. No chalking, excellent gloss retention and colour stability after 600 hours testing.
Accelerated weathering	DIN EN ISO 11507 (UVA - 340)	Cycle: 8 hours at 60 °C UV and 4 hours at 45 °C condensation. No chalking, excellent gloss retention and colour stability after 3000 hours testing.
Natural weathering test	ISO 2810 (South Florida, 27 °N)	No chalking, excellent gloss retention and colour stability after 36 months exposure (angle of 5 ° to South).
Flame spread index	ASTM E 84-06a	Class 1 or A
Smoke development	ASTM E 84-06a	Class 1 or A
Total Solar Reflectance**	ASTM C 1549	TSR ≥ 0.25

Approval

This product is certified according to Qualicoat Class 2 and has weathering performance in line with AAMA 2604. Qualicoat: P-1298 (TH)



Product warranty

This product is backed by a 25-year product warranty system when used on an architectural aluminium substrate, subject to terms and conditions.

Disclaimer

The information in this document is given to the best of Jotun's knowledge, based on laboratory testing and practical experience. Jotun's products are considered as semi-finished goods and as such, products are often used under conditions beyond Jotun's control. Jotun cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Jotun reserves the right to change the given data without further notice.

Users should always consult Jotun for specific guidance on the general suitability of this product for their needs and specific application practices.

If there is any inconsistency between different language issues of this document, the English (United Kingdom) version will prevail.

19 July 2017 Page: 3/4 Date of issue:

This Technical Data Sheet supersedes those previously issued.

The Technical Data Sheet (TDS) is recommended to be read in conjunction with the Safety Data Sheet (SDS) and the Application Guide (AG) for this product. For your nearest local Jotun office, please visit our website at www.jotun.com

^{*} According to Qualicoat Class 2 test procedures. ** Only applicable for the colours featured in 'The Cool Shades Collection'.







20th May 2010

DETERMINATION OF VOLATILE ORGANIC COMPOUNDS (VOC) CONTENT

ASSESSMENT CONDUCTED BY JOTUN POWDER COATINGS

Volatile Organic Compounds is one of the areas of focus within the Green Seal -GS 11 Standard and Green Star Man-5 Building Users Guide. Although these standards cover decorative paints and coatings, it does not, as yet, include industrial coatings. However, in order for Jotun to reply our costumer's questions on this subject, a VOC analysis was performed on PE-F series powder coating. This was carried out to indicate whether VOC requirement highlighted in the standards could be met.

The samples are to be weighed prior to and after exposure to provide a weight loss in grams. The test results are based on three parallel measurements and presented as average readings.

The samples are exposed at 115±1°C, after that, they shall be evaluated. The weight loss obtained represents the combined weight loss of VOC and water.

Sample Identification:

DESCRIPTION	SPECIFIC GRAVITY	
Corro -Coat PE-F Facade Series 1307	1.67 g/cm ³	











Results:

Weight Loss

AVERAGE INITIAL WEIGHT	AVERAGE WEIGHT LOSS (g/ kg sample)	AVERAGE WEIGHT LOSS (g/lt)
30.54 g	2.37 g / kg	1.45 g /lt

Conclusion:

Based on our measurements, the product Corro -Coat PE-F Series 1307 is in line with independent Bodycote test results already carried out on both Corro-Coat PE-SDF Series 2903 and Corro-Coat Durasol series. Corro-Coat PE-F Series 1307 is in the criteria given by Green Seal and Green Star regarding maximum VOC content.

P.O. Box: 51033 Dubai - U.A.E

er Coatings

Date: 20th May 2010

Nilufer Dilbil

Regional R&D Manager -ME

Jotun Powder Coatings UAE (LLC)



P.O. Box 51033, Dubai, United Arab Emirates



Technical Data Sheet





Corro-Coat PE-F 1301, 1303, 1307, 1308

PRODUCT DESCRIPTION

This lead-free TGIC powder coating is specifically designed to meet stringent requirements of the construction industry. It provides longevity to the projects and building components by ensuring gloss retention, colour stability and corrosion protection. This powder enables efficient application and provides uniform flow and attractive finish even after recycling.

Application areas

Primary areas of application are architectural aluminium extrusions and claddings. The overall excellent properties and attractive appearance of this product make it suitable for application to other ferrous and non-ferrous substrates.

When screen printing or sealants are used, it is advised to run separate trials to ensure compatibility and to meet the required performance criteria.

POWDER PROPERTIES

Storage

Keep in a dry cool area. Maximum temperature 25 °C. Maximum relative humidity 60 %. Under these mentioned conditions, product shelf life is 12 months from date of manufacture.

APPLICATION

Pretreatment

The overall performance of the coating system is largely dependent on the nature of the substrate and the type and quality of the pretreatment. For optimal results, it is recommended to follow the pretreatment supplier's instructions and recommendations.

The recommended types of pretreatment for the most frequently used substrates are:

 Substrate
 Pretreatment

 Aluminium
 Chromate conversion

 Steel
 Zinc phosphate

Zinc coated steel Zinc phosphate or chromate conversion

Final rinse (deionized)

The last running water from the object should be tested at 20 °C.

The reading a bit is an about a security below 20 °C.

The readings obtained should measure below 30 µS/cm.

Suitable chrome-free pretreatment for aluminium is also recommended. Due to the variety of chrome-free pretreatments available today, only the approved systems from Qualicoat and GSB should be used. Detailed advice should be sought from the pretreatment supplier.

Curing

Date of issue: 12 May 2015 Page: 1/4

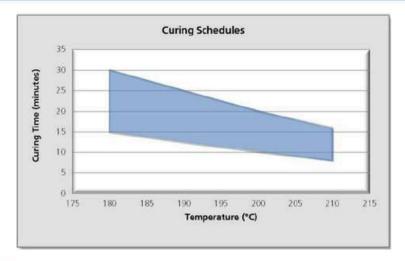
This Technical Data Sheet supersedes those previously issued.

The Technical Data Sheet (TDS) is recommended to be read in conjunction with the Safety Data Sheet (SDS) for this product. For your nearest local Jotun office, please visit our website at www.jotun.com



Technical Data Sheet Corro-Coat PE-F 1301, 1303, 1307, 1308





Equipment

Suitable for Corona or Tribo charging equipment.

APPEARANCE

ColourAvailable in RAL, NCS and in a wide assortment of custom-made colours, this coating provides a variety of effects, including metallic. Also available in the Cool

coating provides a variety of effects, including metallic. Also available in the Cool Shades Collection - a selection of colours with heat-reflective properties.

Gloss EN ISO 2813 (60°)

 Series 1301
 12 ± 5

 Series 1303
 30 ± 5

 Series 1307
 77 ± 7

 Series 1308
 90 ± 10

If the significant surface is too small or unsuitable for the gloss to be measured with the glossmeter, the gloss should be compared visually with the reference sample (from the same viewing angle).

Gloss measurements of metallic effect coatings can show deviation from original levels specified in this document and visual comparison with the reference sample is recommended.

PERFORMANCE

The technical data provided below are typical for this product when applied as following:

Substrate Chromated aluminium panels

Substrate thickness (mm) 0,8 Film thickness (µm) 60-90

Typical values when tested have not necessarily been recently revised.

Property	Standard	Result Cross-cut rating Gt0 (100 % adhesion)		
Adhesion	EN ISO 2409 (2 mm)			
Impact resistance	EN ISO 6272 /ASTM D2794 (impactor diameter 15.9 mm)	More than 23 inch-pounds or 2.5 Nm without film cracking		
Cupping test	EN ISO 1520	Indentation depth in excess of 5 mm without film cracking		
Flexibility	EN ISO 1519	Cylindrical Mandrel bending test, passes 5 mm Mandrel diameter		

Date of issue: 12 May 2015
This Technical Data Sheet supersedes those previously issued.

Page: 2/4



Technical Data Sheet Corro-Coat PE-F 1301, 1303, 1307, 1308



Film hardness	EN ISO 2815	Indentation resistance according to Buchholz: > 80		
Mortar resistance	EN 12206-1	The mortar must be easy to remove without leaving any residues.		
Drilling, milling and sawing test		No flaking of coating.		
Neutral salt spray resistance	ASTM B117	No blistering or loss of adhesion after 10 hours		
Humidity resistance containing SO ₂ .	EN ISO 3231 (0.2 I SO ₂)	No infiltration exceeding 1 mm on both sides of the scratch after 30 cycles.		
Humidity resistance	EN ISO 6270-2	No infiltration exceeding 1 mm on both sides of the scratch after 1000 hours		
Acetic acid salt spray resistance	ISO 9227	After 1000 hours testing – maximum 16 mm infiltration over a scratch length of 1 cm.		
Accelerated weathering	DIN EN ISO 11507 (UVB - 313)	Cycle: 4 hours at 50 °C UV and 4 hours at 40 °C condensation. No chalking, excellent gloss retention and colour stability after 300 hours testing.		
Accelerated weathering	DIN EN ISO 11507 (UVA - 340)	Cycle: 8 hours at 60 °C UV and 4 hours at 45 °C condensation. No chalking, excellent gloss retention and colour stability after 1000 hours testing.		
Natural weathering test	ISO 2810 (South Florida, 27 °N)	No chalking, excellent gloss retention and colour stability after 12 months exposure (angle of 5° to South).		
Surface spread of flame	BS 476 Part 7 - 1997	Class 1		
Fire propagation test	BS 476 Part 6 - 1989	Excellent index of performance (I=1)		
Total Solar Reflectance*	Total Solar Reflectance* ASTM C 1549 Grades 1303R, 1307R and 25			

^{*} Only applicable for the colours featured in 'The Cool Shades Collection'.

Approval

This product is certified according to Qualicoat Class 1 and GSB Standard requirements, and has weathering performance in line with AAMA 2603. The approval is specific to colour and local Jotun Powder Coatings unit.

Product warranty

This product is backed by a 10-year product warranty system when used on an architectural aluminium substrate, subject to terms and conditions.

Disclaimer

The information in this document is given to the best of Jotun's knowledge, based on laboratory testing and practical experience. Jotun's products are considered as semi-finished goods and as such, products are often used under conditions beyond Jotun's control. Jotun cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Jotun reserves the right to change the given data without further notice.

Users should always consult Jotun for specific guidance on the general suitability of this product for their needs and specific application practices.

If there is any inconsistency between different language issues of this document, the English (United Kingdom) version will prevail.

Date of issue: 12 May 2015 Page: 3/4

This Technical Data Sheet supersedes those previously issued.



Technical Data Sheet Jotus Protects Property

Jotun Durasol

PRODUCT DESCRIPTION

This lead-free powder coating is designed to withstand the most stringent weather conditions and meet industry requirements for high performance and long lasting attractive finishes. This TGIC-free product combines outstanding gloss retention and colour stability properties and ensures highest corrosion resistance levels.

Application areas

This product is highly recommended for architectural aluminium extrusions and claddings where climatic conditions put severe strain on exterior surface and where advanced corrosion protection, gloss and color retention are essential.

When screen printing or sealants are used, it is advised to run separate trials to ensure compatibility and to meet the required performance criteria.

POWDER PROPERTIES

Storage

Keep in a dry cool area. Maximum temperature 25 °C. Maximum relative humidity 60 %. Under these mentioned conditions, product shelf life is 6 months from date of manufacture.

APPLICATION

Pretreatment

The overall performance of the coating system is largely dependent on the nature of the substrate and the type and quality of the pretreatment. For optimal results, it is recommended to follow the pretreatment supplier's instructions and recommendations.

The recommended types of pretreatment for the most frequently used substrates are:

Substrate Pretreatment
Aluminium Chromate conversion

Final rinse (deionized) The last running water from the object should be tested at 20 °C.

Curing

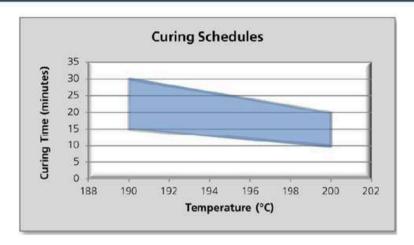
Date of issue: 12 May 2015 Page: 1/3

This Technical Data Sheet supersedes those previously issued.



Technical Data Sheet Jotun Durasol





Equipment

Suitable for Corona or Tribo charging equipment.

APPEARANCE

Colour Selected range of RAL colours. Additional colours can be made upon request.

Gloss EN ISO 2813 (60°) 22 ± 5

If the significant surface is too small or unsuitable for the gloss to be measured with the glossmeter, the gloss should be compared visually with the reference sample (from the same viewing angle).

Gloss measurements of metallic effect coatings can show deviation from original levels specified in this document and visual comparison with the reference sample is recommended.

PERFORMANCE

The technical data provided below are typical for this product when applied as following:

Substrate Chromated aluminium panels

Substrate thickness (mm) 0,8 Film thickness (µm) 50-70

Typical values when tested have not necessarily been recently revised.

Property	Standard	Result			
Adhesion	EN ISO 2409 (2 mm)	Gt 0			
Impact resistance	EN ISO 6272 /ASTM D2794 (Impactor diameter 15.9 mm)				
Cupping test	EN ISO 1520	Passes 5 mm indentation without detachment after tape pull test.			
Flexibility	EN ISO 1519	Passes 5 mm cylindrical Mandrel bend te without detachment after tape pull test.			
Film hardness	EN ISO 2815	Indentation resistance according to Buchholz: > 80			
Mortar resistance	EN 12206-1	The mortar must be easy to remove without leaving any residues.			

Date of issue: 12 May 2015 Page: 2/3

This Technical Data Sheet supersedes those previously issued.



Technical Data Sheet Jotun Durasol



Drilling, milling and sawing test		No flaking of coating.		
Neutral salt spray resistance	ASTM B117	No blistering or loss of adhesion after 4000 hours.		
Humidity resistance containing SO ₂ .	EN ISO 3231 (0.2 I SO ₂)	No infiltration exceeding 1 mm on both sides of the scratch after 40 cycles.		
Humidity resistance	EN ISO 6270-2	No infiltration exceeding 1 mm on both sides of the scratch after 4000 hours.		
Acetic acid salt spray resistance	ISO 9227	After 2000 hours testing – maximum 16 mm² infiltration over a scratch length of cm.		
Accelerated weathering	DIN EN ISO 11507 (UVB - 313)	Cycle: 4 hours at 50 °C UV and 4 hours 40 °C condensation. No chalking, excell gloss retention and colour stability after 1200 hours testing.		
Accelerated weathering	DIN EN ISO 11507 (UVA - 340)	Cycle: 8 hours at 60 °C UV and 4 hours at 45 °C condensation. No chalking, excellent gloss retention and colour stability after 5000 hours testing.		
Natural weathering test	ISO 2810 (South Florida, 27 °N)	No chalking, excellent gloss retention and colour stability after 10 years exposure (angle of 45 ° to South).		
Flame spread index	ASTM E 84-06a	Class 1 or A		
Smoke development	ASTM E 84-06a	Class 1 or A		

Approval

This product is certified according to Qualicoat Class 3 standard and has weathering performance in line with AAMA 2605. The approval is specific to colour and local Jotun Powder Coatings unit.

Product warranty

This product is backed by a 30-year product warranty system when used on an architectural aluminium substrate, subject to terms and conditions.

Disclaimer

The information in this document is given to the best of Jotun's knowledge, based on laboratory testing and practical experience. Jotun's products are considered as semi-finished goods and as such, products are often used under conditions beyond Jotun's control. Jotun cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Jotun reserves the right to change the given data without further notice.

Users should always consult Jotun for specific guidance on the general suitability of this product for their needs and specific application practices.

If there is any inconsistency between different language issues of this document, the English (United Kingdom) version will prevail.

Date of issue: 12 May 2015 Page: 3/3

This Technical Data Sheet supersedes those previously issued.



Bodycote

Bodycote Testing Limited. Coatings Division. 6 Coronet Way, Centenary Park, Eccles, Manchester M50 1RE Tel 0161 787 3250 Fax 0161 787 3251

DETERMINATION OF VOLATILE ORGANIC COMPOUNDS (VOC) CONTENT

ASSESSMENT CONDUCTED ON BEHALF JOTUN POWDER COATINGS

Date: 28th April 2009

Bodycote Testing ref: N950931 Issue 1

Client details

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Bodycote Testing Limited
North West Laboratory

OPERATIONS MANAGER





Item - Determination of volatile organic compounds (VOC) content

REF No: N 950 931 Issue 1

Client Requirements:

Volatile Organic Compounds is one of the areas of focus within the *Green Seal Certification* as stated in the *GS 11 Standard* and *Green Star Compliance Criteria* as stated in *Office As Built v2*, *Man-5 Building Users Guide*.

Although the above mentioned standards cover decorative paints and coatings, it does not, as yet, include industrial coatings. The client requested Bodycote to perform a VOC analysis on specific powder coatings grades to indicate whether the VOC requirements highlighted in the standards could be met.

The samples are to be weighed prior to and after exposure to provide a weight loss in grams. The test results are based on two parallel measurements and presented as average readings.

The samples are exposed for 16 hours at $115 \pm 1^{\circ}$ C, after which, they shall be evaluated. The weight loss obtained represents the combined weight loss of VOC and water.

Sample Identification:

BODYCOTE REF	DESCRIPTION	SPECIFIC GRAVITY
N950931	Corro-Coat PE-SDF Series 2903	1.47 g/cm³ (Supplied by Jotun)

Results:

Weight Loss

BODYCOTE REF	AVERAGE INITIAL WEIGHT	AVERAGE WEIGHT LOSS (g/ kg sample)	AVERAGE WEIGHT LOSS (g/litre)
N950931	42.93 g	0.71 g	0.48 g/litre

Conclusion:

Based on the measurements above, the product Corro-Coat PE-SDF Series 2903 complies with the criteria issued by the GS 11 Standards of Green Seal and Office As Built v2, Man-5 Building Users Guide of Green Star regarding maximum VOC content.

All testing was conducted in accordance with client's instructions. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. No individual sections of this report shall be reproduced except with the written permission of Bodycote Testing Ltd



Product Data Sheet

Corro-Coat PE-F

Series 1301,1303, 1307 and 1308

Product Description Corro-Coat PE-F Series 1301, 1303, 1307 and 1308 are exterior durable polyester TGIC powder

coatings especially formulated to satisfy the most stringent requirements for colour stability, gloss retention and corrosion protection. Corro-Coat PE-F Series 1301, 1303, 1307 and 1308

provide a uniform flow and finish even after recycling.

Application Areas Primary areas of application are architectural aluminum extrusions and claddings. The overall

excellent properties and attractive appearance of Corro-Coat PE-F Series 1301, 1303, 1307 and 1308 make them suitable for application to other ferrous and non-ferrous substrates.

When screen printing or sealants are used, it is advised to run separate trials to ensure

compatibility and to meet the required performance criteria.

Pre-treatment The overall quality of the coating system is largely dependent on the type and quality of the

pre-treatment. The recommended types of pre-treatment for the most frequently used

substrates are:

Aluminum Chromate conversion

Steel Zinc phosphate

Zinc coated steel Zinc phosphate or chromate conversion

Final rinse (deionized) The last running water from the object should be tested at 20°C.

The readings obtained should measure below 30µS/cm.

Curing Schedules 15 minutes at 180°C object temperature

10 minutes at 200°C object temperature 8 minutes at 210°C object temperature

Colour Selection Corro-Coat PE-F Series 1301, 1303, 1307 and 1308 are available in a wide assortment of custom-

made colours and metallic finishes, including RAL and NCS.

Powder Application Corro-Coat PE-F Series 1301, 1303, 1307 and 1308 are available for Corona or Tribo charging

equipment.

Product Warranty Corro-Coat PE-F Series 1301, 1303, 1307 and 1308 are backed by a 15-year product warranty

system for exterior application and a 25-year product warranty system for interior application

when used on architectural aluminum substrates.

Storage Conditions Keep in a dry cool area. Maximum temperature 25°C. Maximum relative humidity 60%.

(Please refer to Section 7 of the "Recommended Process and Process Control Requirements for

Architectural Aluminum Alloys' Coating" in Part 2 of the "Quality and Warranty" document).

Maintenance Please refer to "Powder Coated Façades' Maintenance" in Part 3 of the "Quality and Warranty"

document.

Approvals Please consult your local Jotun Powder Coatings' production unit.





Technical Data

The technical data provided below are typical for Corro-Coat PE-F Series 1301, 1303, 1307 and 1308 applied to 0.8 mm chromated aluminum panels (65 micron film thickness). Typical values when tested have not necessarily been recently revised.

Description	Norm	Series 1301	Series 1303	Series 1307	Series 1308		
Gloss	EN ISO 2813 (60°)	12 ±5	30 ±5	77 ±7	90 ±10		
Finish	Visual	Soft Texture	Smooth	Smooth	Smooth		
Adhesion	EN ISO 2409 (2 mm)	Cross-cut rating Gt0 (100% adhesion).					
Impact resistance	ASTM D 2794 (5/8"ball)	More than 23 inch-pounds or 2.5 Nm without film cracking.					
Cupping test	EN ISO 1520	Indentation depth in excess of 5 mm without film cracking.					
Flexibility	EN ISO 1519	Cylindrical Mandrel bending test, passes 5 mm Mandrel diameter.					
Film hardness	EN ISO 2815	Indentation resistance according to Buchholtz: > 80.					
Mortar resistance	ASTM C 207	After 24 hours at specified conditions, mortar is easily removed from the coating resulting neither in loss of adhesion nor in surface marring.					
Drilling, milling and sawing test		No flaking of coating.					
Salt spray resistance	ASTM B 117	No blistering and maximum 1 mm corrosion creep from scratch after 3000 hours.					
Resistance to humid atmospheres containing SO ₂	EN ISO 3231 (0.2 SO ₂)	No blistering and maximum 1 mm corrosion creep from scratch after 30 cycles.					
Resistance to humid atmospheres	DIN 50017	No blistering and maximum 1 mm corrosion creep from scratch after 3000 hours.					
UV resistence	ASTM G 154 (UVB-313)	Cycle: 4 hours at 50°C UV and 4 hours at 40°C condensation. No chalkin excellent gloss retention and colour stability after 300 hours testing.					
Accelerated weathering test	ASTM G 154 (UVA-340)	Cycle: 8 hours at 60°C UV and 4 hours at 45°C condensation. No chalkir excellent gloss retention and colour stability after 1000 hours testing.					
Natural weathering test	ASTM G 7 (South Florida, 27°N)	No chalking, excellent gloss retention and colour stability after 12 mo exposure (angle of 5° to South).					
Surface spread of flame	BS 476 Part 7 - 1987	Class 1					
Fire propagation test	BS 476 Part 6 - 1989	Excellent index of	performance.	Excellent index of performance.			



Recommended Process and Process Control Requirements for Architectural Aluminum Alloys' Coating

1. APPLICATION AREAS

- 1.1. Aluminum Pressings, Sheets and Extrusions for Exterior Application
- 1.1.1. The aluminum or aluminum alloy must be suitable for the pre-treatment and the coating's process. It should allow the coating properties to perform as specified in the relevant technical properties provided in the Product Data Sheets, as well as other properties specified for these systems. The substrate must be bare clean, free from corrosion, and not exposed beforehand to any anodic or organic coating.
- 1.1.2. There must be no sharp edges. The edges radii must allow the coating to completely cover the whole object's surface to ensure adequate film thickness and prevent holidays.
- 1.1.3. When assembling coated elements together or installing a coated object in place, it is recommended to avoid the combination of different substrates; this will prevent exposure to galvanic corrosion.

2. LABORATORY EQUIPMENT

- 2.1. Essential Equipment for Pre-treatment Chemicals' Test, Rinsing Water Test and Final Results' Test
- 2.1.1. Pre-treatment chemicals test must be performed according to the suppliers' instructions.
- 2.1.2. Conductivity measurement gauge for final rinse evaluation.
- 2.1.3. Temperature recorder.
- 2.1.4. Coating weight equipment, DIN 50939 or equal.

2.2. Necessary Equipment for Powder Coating Test

- 2.2.1. Film thickness gauge suitable for use on aluminum EN ISO 2360.
- 2.2.2. Cross cut equipment EN ISO 2409 2 mm including Permacel 99 tape or Scotch 610.
- 2.2.3. Bend test equipment EN ISO 1519 5 mm Mandrel.
- 2.2.4. Indentation test equipment EN ISO 2815.
- 2.2.5. Impact test equipment ASTM D 2794 (5/8" ball) or ER ISO 6272.
- 2.2.6. Cupping test equipment EN ISO 1520.
- 2.2.7. Gloss measurement equipment ISO 2813 (60°).
- 2.2.8. Boiling water test equipment.
- 2.2.9. Temperature recorder.
- 2.2.10. Cure MEK (Methyl Ethyl Kethon) test equipment.

3. SURFACE TREATMENT PROCEDURE

3.1. Handling

3.1.1. Components or objects must be carefully handled. Avoid contamination with dust, oil, fat, finger marks, etc.





OVERVIEW OF RESOURCES

PERSONNEL:

The Coating Division consists of a total of 68 employees working in accordance to the Coating Division Organization Chart.

COATING DIVISION MANAGER

Production Supervisor

Foremen

Pre-treatment Operators

Booth Operators

Jigging Operators

De-Jigging Operators

Packing & Dispatch

Loading & Unloading

Dispatch Clerks

Sales & Marketing | Maint. Supervisor

Electrical Technician

Mechanical Technician

Quality Controller

Lab Technician

PLANT AND EQUIPMENTS:

Two Production Lines built in area of 66,000 sq ft equipped with the following:

SHARJAH GLASS LINE 1:

Conveyor belt, re-loading zone, well drying gas oven, infra-red zone, gas fired curing oven, electrostatic automatic powder coating booth, manual powder coating booth, chemical pre-treatment line, 2 over head crane hoists.

Installed and commissioned by ERCON PLANT SYSTEMS LTD., MIDACRE, WILLENHALL TRADING ESTATE, WEST MIDLANDS WV 13 2JW, ENGLAND, UNITED KINGDOM.

SHARJAH METAL LINE 2:

Conveyor belt, re-loading zone, well drying gas oven, infra-red zone, gas fired curing oven, electrostatic automatic powder coating booth, manual powder coating booth, chemical pre-treatment line, 2 over head crane hoists.

Installed and commissioned by ITALTECNO s.r.l, VIA MARINUZZI N. 38, 41100 MODENA ITALY.

Equipped with a high international standard "maintenance tool room", the plant equipment is effectively maintained by a well trained, qualified and experienced maintenance team.

Periodic preventive maintenance is strictly implied to all functional equipments.

A routine daily check as per "Daily Check List" is conducted each day for all production equipments and their working parameters.

Technical guidance from ERCON GROUP, U.K. & ITALTECNO, ITALY is seeked for major break-downs only.



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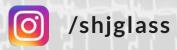
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