



Luxathane Polyurethane Finish

Two Pack Polyurethane

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Product Description

A high build glossy top coat recommended for steel structures in aggressive coastal and industrial atmosphere. Applications suitable for use in tank and associated structural and also in earth moving equipment, radiators component, transformers.

Usage Areas

An Acrylic Polyurethane Enamel which provides a durable high gloss exterior coating in refineries, power plants and in chemical plants situated at coastal environments. It has excellent colour and gloss retention properties. When fully cured, it forms an extremely tough and abrasion resistant finish.

Product Data

Composition	Acrylic Resin with Aliphatic Isocyanate Hardener suitably pigmented
Volume Solids	60±2%
VOC	344 Mixing Ratio Base : Catalyst :: 4:1 (V/V)
Application Method	Brush or Air/ Airless spray
Recommended DFT	50-65 µ per coat
Recommended WFT	83-108 µ per coat
Theoretical Spreading Rate	9.2-12.0 m ² /ltr /coat
Colour	Assorted Shades
Gloss	Glossy

Practical Coverage : Dependent on-site condition and transfer losses due to substrate design, profile, wind, heights, application method, painter's skill etc.

Pot Life

10°C	15°C	25°C	40°C
12 hrs	10 hrs	5 hrs	4 hrs





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Typical Coating Systems	Systems compatibility can be provided on request to the Technical Service Team		
	Coats	Generic Systems	Compatible Products
	Primer	Zinc Anode Coating, Zinc Rich Primer DTM Coating	Zinc Anode 304 HS Silicate Coating, Epilux HB ZR Primer, Protectomastic DTM Coating
	Mid Coat	Epoxy MIO, Polyurethane Coating	Luxathane Polyurethane Finish, Epilux 485 High Build MIO Coating, Epilux 155 SB RPL MIO Coating
	Top Coat	Polyurethane and Polysiloxane	Luxathane Polyurethane Finish

Conforms to

Performance requirements of SSPC Paint 20 Type II and ISO 12944 with a 80% Zinc on dry film by weight.

Pack size		UOM	Part A	Part B	Total
	Volume	Lt/Kg	16 ltr	4 ltr	20 ltr

Storage	The paints must be in its sealed original containers and be kept under cover in a dry place with ambient conditions inside closed room until use. The curing agent is sensitive to moisture and hence relative humidity within the room should be maintained preferably at $\leq 55\%$. Stacking should not be more than 3 drums/ cartons one above other. DO NOT expose to direct rain/ sunlight. Any deviation to the defined storage condition shall have a negative effect on the shelf life.
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Shelf life	<p>Up to 12 months as long as the sealed original containers are kept under cover in a dry place under normal temperature conditions until use.</p> <p>Note :</p> <ol style="list-style-type: none"> Storage life @23oC will be extended up to 24 months. Storage at elevated temperatures may reduce shelf life; and hence never exceed maximum room temperature of 40°C. Storage life, thereafter, subject to re-inspection; consult tech-service. It may be noted that higher volume solid material will tend to soft settling on long term storage, and it can made to a normal homogeneous consistency by use of a slow speed 200-400 rpm power stirrer particularly in the PART A (BASE) container; and this soft settling is not considered as a failure of keeping properties.
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Flash Point	Part A	Part B	Mixed Paint
	24°C	24°C	24°C

Health & Safety

Please refer to the separate Safety Data Sheet available with detailed information.





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APPLICATION GUIDELINE

Substrate	Mild Steel	
Surface preparation	<p>Remove grease, oil and other contaminants preferably by Solvent cleaning to SSPC SP1. For all areas of exposure to bare metal during touch up or in areas of rusting, make full use of mechanical tools like power wire brush and wire brushing to remove loose rust to SSPC SP2/ SP3 and feather the edges of painted area with 300 emery. Excessive burnishing of steel is to be avoided. Thoroughly dust down all clean surfaces. The prepared area should be primed as per coating system and allow for over night drying. The surface should be clean and dry before application of appropriate primer coat. Luxathane Polyurethane Finish is applied as a top coat.</p>	
Atmospheric Condition	Ventilation	Suitable air engineering systems, which will ensure reduction of air contaminants and thatto further help regulate the temperature and humidity of the working environment.
	Dew Point	Ensure surface temperature to be more than 3°C over the dew point temperature.
	Humidity	Do not apply when relative humidity rises above 85%.
Mixing	<p>Stir the base thoroughly and then mix base to a homogenous liquid and then add recommended part of catalyst to uniform consistency.Allow the mixture to mature for 10 minutes and stir again before application and during use.</p> <p>NOTE : DO NOT ADD THINNER beyond recommendation as it will reduce mixed VS calling for revised WFT calculations as well as challenges on flow properties.</p>	
Thinner	Thinner 825	





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Application	<p>Brush : Apply preferably without thinning or may take up to 5% thinner if required.</p> <p>Conventional Spray : Apply with NOT MORE than 15 - 45% Thinner. For small complicated item much higher application viscosity is needed to avoid sagging and in that case thinner intake will be 30-35 %. Use any standard Equipment at an atomising pressure of 4.2-4.9 Kg/Cm² using a hand gun with 1-1.2 mm orifice.</p> <p>Airless Spray : Apply preferably without thinning. However, upto 5 - 15% Thinner 842 may be added if absolutely essential depending on conditions. Use any standard equipment having pump ratio 45 : 1 Tip Size : 0.43 to 0.53 mm. Tip Pressure : 110 - 160 Kg/cm²</p> <p>*Do not apply on hot/ cold surfaces. Always apply within the window of 10-50°C</p>			
Work Stoppage	<p>Ensure to use the mixed paint within pot life as there are no methods to increase working pot life. Keep the working tools and tips free of drying and clogging. Always use fresh material and never add-up to previous mixed paints.</p>			
Clean Up	<p>Clean all equipment immediately after use with thinner 825. It is good working practices to flush or clean all the spray equipment periodically. All the surplus materials and empty containers should be disposed of in accordance with appropriate regional regulations</p>			
Drying Time	Temperature	Touch dry	Handle dry	Hard dry
	10°C	120 min	18 Hrs	24 hrs
	23°C	90 min	12 Hrs	16 hrs
	30°C	60 min	7 Hrs	10 hrs
	40°C	50 min	6 Hrs	8 hrs
Over Coating Intervals		@23°C		@30°C
	MIN	Overnight		10 hrs
	MAX	Extended		Extended





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Curing Time	<p>One week</p> <p>NOTE : Drying and Curing times are determined under controlled temperatures and at relative humidity below 85%, for the NDFT of the product.</p>
Inspection	<p>Refer SSPC PA2 guidelines for measurement of DFT.</p> <p>Do not conduct any destructive test like peel off/ pull off & high voltage Holiday test unless and otherwise mandatory in the specification.</p> <p>Consult Technical Service team for preparation of QAP (Quality Assurance plan).</p>
Repair Methodology	<p>Clean off loose paints, debris, contaminants and ensure spot repair with available tools as practiced in hand/ power tool cleaning using wire brush/buffing, emery/feathering to smoothen the edges of impaired areas. Use appropriate touch up primer followed by recommended coating system, allowing due over coating interval time to area of 2-3 inches in excess of the spot repaired portion.</p>
Product Characteristics	<ul style="list-style-type: none"> • Luxathane Polyurethane Finish is a superior polyurethane used in coastal zones for protection against ultraviolet radiation for its superior colour retention property. • Avoid using a mixture of application methods whenever possible to ensure uniform gloss appearance. • Excessive film builds in a single coat will seriously impair the film properties. • Condensation occurring during or immediately after application may result to an inferior film. • Premature exposure to ponding water will cause a colour change, especially in dark colours.
Disclaimer	<p>The information contained within this Data Sheet is based on information believed to be reliable at the time of its preparation. The Company will not be liable for loss or damage howsoever caused including liability for negligence, which may be suffered by the user of the data contained herein. It is the users' responsibility to conduct all necessary tests to confirm the suitability of any product or system for their intended use. No guarantee of results is implied since conditions of use are beyond our control.</p>