



Lumeros Moisture Cured HR Paint

2K Moisture Cured Heat Resistant Coating

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Product Description

Two component moisture curing heat resistant coating, for protecting mild steel equipments, pipelines and structures from corrosion at continuous operating temperatures maximum up to 600°C. A choice product in petrochemical, refinery, offshore structures for use in insulated and uninsulated pipelines.

Usage Areas

Recommended as a single coat application over inorganic zinc silicate primers for heated pipelines, exhaust pipes, smoke stacks etc., operating at high temperatures for corrosive zones. Also it is recommended directly on abrasive blasted metal for high temperatures exceeding 400 & up to 600°C.

Product Data

Composition	Silicone resin with inert pigment
Volume Solids	42±2%
VOC	498 gms/ltr
Mixing Ratio	Base : Catalyst :: 19:1 (V/V)
Application Method	Brush or Spray
Recommended DFT	20-30 µ per coat
Recommended WFT	48-71 µ per coat
Theoretical Spreading Rate	14.0-21.0 m ² /ltr /coat
Colour	Aluminium, Redoxide, Violet
Gloss	Smooth and Matt

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
3 hrs	2 hrs	1.5 hrs	1 hr





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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 Primer, Heat Resistant Coating	Lumeros IC HR 650, Zinc Anode 304 HZ Coating
	Mid Coat	-	-
	Top Coat	Heat Resistant coating	Lumeros Moisture Cured HR Paint

Pack size		UOM	Part A	Part B	Total
	Volume	Lt/Kg	19 ltr	1 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 @23°C 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
	22°C	22°C	22°C

Health & Safety	Please refer to the separate Safety Data Sheet available with detailed information.
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APPLICATION GUIDELINE

Substrate	Mild Steel, Zinc Primed Steel, Galvanised Steel	
Surface preparation	<p>Carbon Steel/ Mild Steel : Remove grease, oil and other contaminants preferably by using Solvent Cleaning as per SSPC SP1. Abrasive Blast clean to a minimum SSPC SP10. For severe corrosive conditions, blast clean to a surface profile not exceeding 25 microns. Special care must be taken on weld areas to remove flux and spatter; welds should be ground back to avoid pockets. The cleaned surface should be free of dust, contaminants and dry and coated before it gets primed. Stainless Steel: Abrasive blast to SSPC SP 6 using non-metallic abrasive (Aluminium Oxide) and ensure a surface profile of 45 to 55 microns.</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.</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 T18	





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Application	<p>Brush : Apply, without thinning, to the recommended thickness.</p> <p>Conventional Spray : Add maximum upto 5- 10 % Thinner T18 depending on conditions. Use any suitable standard equipment at an atomising pressure of 2.8-3.5 kg/ sq.cm.</p> <p>Airless Spray : Apply without thinning or allowed to maximum of 5- 7% of Thinner depending on site conditions. Use any standard equipment of 40:1 pump ratio with the Tip Size : 0.43-0.53mm. Tip Pressure : 130-170 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 T18. 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	9 hrs	30 hrs
	23°C	90 min	8 hrs	24 hrs
	30°C	60 min	6 hrs	14 hrs
	40°C	45 min	4 hrs	12 hrs
Over Coating Intervals		@23°C		@30°C
	MIN	24 hrs		14 hrs
	MAX	-		-





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Curing Time	<p>One week at ambient conditions</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"> • For optimum corrosion protection at temperatures up to 400°C Lumeros Moisture Cured HR Paint should be applied over an zinc anode primer. Application of two full coats can sometimes result in pinholes in the topcoat. • This material is air drying and is suitable for application both in the fabrication yard and on-site where stoving facilities are not available. • Over-application can lead to blistering at high temperatures. • Some minor colour and gloss changes will be visible upon high heat exposure. • The coated substrate must be exposed to 150°C for two hours or more to facilitate full-cure.
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>