



Epilux 455 HB MIO Coating

Two Pack, cured with Polyamide Hardener

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Product Description

A high build epoxy coating reinforced with Micaceous Iron Oxide (MIO) designed for application on structural steel as an intermediate epoxy coating. It has high abrasion resistance and superb water impermeability with extended overcoating window.

Usage Areas

Recommended for steel structures in aggressive coastal and industrial atmosphere. Applications include ship loaders, hopper conveyors, silos, storage tanks, pipelines and general structurals in fertilizer plants, refineries, petrochemicals etc.

Product Data

Composition	Catalysed Resin Pigmented with MIO
Volume Solids	80 ± 3%
VOC	175 gms/ltr
Mixing Ratio	Base : Catalyst :: 3:1 (V/V)
Application Method	Airless Spray
Recommended DFT	75-125 µ per coat
Recommended WFT	94-156 µ per coat
Theoretical Spreading Rate	6.4-10.7 m ² /ltr /coat
Colour	Grey
Finish	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
8 hrs	6 hrs	4 hrs	3 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 Rich Primer	Epilux HB ZR Primer, Epilux ZNPH HBX Primer
	Mid Coat	Epoxy based Intermediate (MIO)	Epilux 455 HB MIO
Conforms to	Top Coat	Epoxy Polyurethane, Polysiloxane, Fluorothane	Luxathane Polyurethane Finish, Epilux 4 HB Epoxy Coating, BR Acrylic Polysiloxane Finish
	RDSO specification PCN 129		

Pack size		UOM	Part A	Part B	Total
	Volume	Lt/Kg	15 ltr	5 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	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. Note : 1. 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. 2. 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
	25°C	25°C	25°C

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

Substrate	Steel.	
Surface preparation	<p>Steel : Remove grease, oil and other contaminants as per SSPC SP 1. For application of primer; abrasive blast clean to a minimum of SSPC SP 10. For severe corrosive conditions, blast to SSPC SP 5 with a surface profile not exceeding 35-40 microns. Thoroughly dust down all surfaces. The surface should be clean and dry and after application of appropriate primer. Epilux 455 HB MIO Coating is applied as an intermediate coating.</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 15 minutes and stir again before and during application.</p> <p>NOTE : 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 15 minutes and stir again before and during application.</p>	
Thinner	Thinner 844	





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Application	<p>Stir the base thoroughly and then mix three parts of base and one part of catalyst by volume to uniform consistency. Allow the mixture to mature for 15 minutes and stir again before and during application.</p> <p>Airless Spray : Apply without thinning. However upto 5% may be added if absolutely essential depending on conditions. Use any standard equipment having pump ratio 40:1, Tip size : 0.48 - 0.53 mm. Tip pressure : 140 - 165 Kg/cm2. Touch up and stripe coats can be applied by brush application.</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 844. 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	6 hrs	20 hrs	30 hrs
	23°C	4 hrs	14 hrs	24 hrs
	30°C	2 hrs	10 hrs	16 hrs
	40°C	1 hr	8 hrs	12 hrs
Over Coating Intervals		@23°C		@30°C
	MIN	24 hrs		16 hrs
	MAX	2 months		2 months





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Curing Time	<p>7 days</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"> • Epilux 455 HB MIO Coating exhibits excellent resistance to Water when exposed to splashes, spills, and mild fumes. • Very good resistance to Salt when exposed to splashes, spills, and mild fumes. • Good resistance to Alkalis when exposed to splashes, very good for mild fumes. • Good resistance to Solvents when exposed to both splashes and mild fumes. • Fair resistance to Acids when exposed to splashes, spills, and mild fumes. <p><i>Note: A suitable top coat is needed for proper protection in a chemical environment.</i></p> <ul style="list-style-type: none"> • The temperature resistance is 93°C for continuous use and 120°C for intermittent use. • The weatherability is excellent in the system. • The flexibility is good. • The abrasion resistance is very good.
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>