

Epoxy Novolac

PRODUCT DESCRIPTION

Envioline 405HT BR is an ultra high solids brush grade version of Envioline 405HTR and is specifically designed for stripe coat application over welds and seams in tanks that require excellent heat resistance with outstanding corrosion protection.

INTENDED USES

Used in combination with Envioline 405HTR to handle harsh environments in the petroleum industry, including crude oil, free water knockouts, treaters, and separator vessels and tanks with high operating temperatures.

Typical use is for stripe coating of welds, seams and rivet heads in steel tanks prior to application of Envioline 405HTR topcoat.

The product offers the following benefits:

- Good brush application
- Excellent flexibility and impact resistance
- Excellent adhesion
- High temperature stability
- Resists wide range of chemicals
- Thermal and mechanical shock resistance

PRACTICAL INFORMATION FOR ENVIROLINE 405HT BR

Colour	Tan			
Gloss Level	Not applicable			
Volume Solids	90% ± 2%			
Typical Thickness	125-250 microns (5-10 mils) dry equivalent to 139-278 microns (5.6-11.1 mils) wet			
Theoretical Coverage	7.20 m ² /litre at 125 microns d.f.t and stated volume solids 289 sq.ft/US gallon at 5 mils d.f.t and stated volume solids			
Practical Coverage	Allow appropriate loss factors			
Method of Application	Brush			
Drying Time	Overcoating Interval with recommended topcoats			
Temperature	Touch Dry	Hard Dry	<i>Minimum</i>	<i>Maximum</i>
25°C (77°F)	3 hours	6 hours	4 hours	2 days
40°C (104°F)	2 hours	4 hours	2 hours	24 hours

REGULATORY DATA

Flash Point (Typical)	Part A 57°C (134°F); Part B 63°C (145°F)		
Product Weight	1.55 kg/l (12.9 lb/gal)		
VOC	53 g/lit (0.44 lb/gal)	Calculated	

See Product Characteristics section for further details

Protective Coatings

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SURFACE PREPARATION

All surfaces to be coated should be clean, dry and free from contamination. Prior to paint application all surfaces should be assessed and treated in accordance with ISO 8504:2000.

Where necessary, remove weld spatter and where required smooth weld seams and sharp edges.

Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

Steel Substrates

This product must only be applied to surfaces prepared by abrasive blast cleaning to Sa3 (ISO 8501-1:2007) or SSPC SP5.

A sharp, angular surface profile of 75-125 microns (3-5 mils) is recommended.

Enviroline 405HT BR must be applied before oxidation of the steel occurs. If oxidation does occur the entire oxidised area should be reblasted to the standard specified above.

Surface defects revealed by the blast cleaning process should be ground, filled or treated in the appropriate manner.

APPLICATION

Mixing	Material is supplied in two containers as a unit. Complete units should be stored, mixed and applied in accordance with the Enviroline Application Guidelines.	
Mix Ratio	2 part(s) : 1 part(s) by volume	
Working Pot Life	25°C (77°F) 40 minutes	40°C (104°F) 20 minutes
Brush	Recommended	Typically 125-250 microns (5.0-10.0 mils) can be achieved
Thinner	Not recommended	
Cleaner	Enviroline 71C	
Work Stoppages	Thoroughly clean all equipment with Enviroline 71C. Once units of paint have been mixed they should not be resealed and it is advised that after prolonged stoppages work recommences with freshly mixed units.	
Clean Up	Clean all equipment immediately after use with Enviroline 71C. All surplus materials and empty containers should be disposed of in accordance with appropriate regional regulations/legislation.	

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PRODUCT CHARACTERISTICS

The detailed Envioline Application Guidelines should be consulted prior to use.

This datasheet provides general guidance on the use of Envioline 405HT BR. Specific project requirements will be dependent upon the service end use and operating conditions of the tank or vessel.

The detailed project coating specification provided by International Protective Coatings must be followed at all times.

Surface temperature must always be a minimum of 3°C (5°F) above dew point.

Use the following chart for preferred temperature conditions. These conditions plus adequate ventilation must be maintained throughout the curing cycle.

	<u>Substrate Temperature</u>	<u>Air Temperature</u>
Preferred	21-49°C (70-120°F)	21-38°C (70-100°F)
Minimum	16°C (60°F)	16°C (60°F)

Note: VOC values are typical and are provided for guidance purpose only. These may be subject to variation depending on factors such as differences in colour and normal manufacturing tolerances.

SYSTEMS COMPATIBILITY

The following topcoat is recommended for Envioline 405HT BR:

Envioline 405HTR

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ADDITIONAL INFORMATION

Further information regarding industry standards, terms and abbreviations used in this data sheet can be found in the following documents available at www.international-pc.com:

- Definitions & Abbreviations
- Surface Preparation
- Paint Application
- Theoretical & Practical Coverage
- Envioline Application Guidelines

Individual copies of these information sections are available upon request.

SAFETY PRECAUTIONS

This product is intended for use only by professional applicators in industrial situations in accordance with the advice given on this sheet, the Safety Data Sheet and the container(s), and should not be used without reference to the Safety Data Sheet (SDS).

All work involving the application and use of this product should be performed in compliance with all relevant national, Health, Safety & Environmental standards and regulations.

In the event welding or flame cutting is performed on metal coated with this product, dust and fumes will be emitted which will require the use of appropriate personal protective equipment and adequate local exhaust ventilation.

If in doubt regarding the suitability of use of this product, consult International Protective Coatings for further advice.

Warning: This product contains liquid epoxies and modified polyamines and may cause skin sensitisation if not used correctly.

PACK SIZE	Unit Size	Part A		Part B	
		Vol	Pack	Vol	Pack
	1 US gal	0.67 US gal	1 US gal	0.33 US gal	0.5 US gal

For availability of other pack sizes, contact International Protective Coatings.

SHIPPING WEIGHT (TYPICAL)	Unit Size	Part A	Part B
	1 US gal	9.5 lb	4.9 lb

STORAGE	Shelf Life
	12 months minimum at 25°C (77°F) in original, unopened containers. Subject to re-inspection thereafter. Store in dry, shaded conditions away from sources of heat and ignition.

Important Note

The information in this data sheet is not intended to be exhaustive; any person using the product for any purpose other than that specifically recommended in this data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at their own risk. All advice given or statements made about the product (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 to do so, we do not accept any liability at all for the performance of the product or for (subject to the maximum extent permitted by law) any loss or damage arising out of the use of the product. We hereby disclaim any warranties or representations, express or implied, by operation of law or otherwise, including, without limitation, any implied warranty of merchantability or fitness for a particular purpose. All products supplied and technical advice given are subject to our Conditions of Sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is liable to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to check with their local representative that this data sheet is current prior to using the product.

This Technical Data Sheet is available on our website at www.international-marine.com or www.international-pc.com, and should be the same as this document. Should there be any discrepancies between this document and the version of the Technical Data Sheet that appears on the website, then the version on the website will take precedence.

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