Enviroline® 125U

International®

Epoxy Novolac

PRODUCT DESCRIPTION

A solvent free, two component, reinforced polycyclamine cured lining system utilizing advanced epoxy novolac technology.

INTENDED USES

Enviroline 125U is a new generation system providing improved performance benefits:

- Ultra low VOC
- Excellent adhesion
- Resistance to sour crude oil, gasoline and gasohol
- Fast cure (rapid return to service in 12 hours at 25°C (77°F))
- Single coat application
- Meets API 1631 requirements for lining underground storage tanks

Applications include internal tank lining for steel, fibreglass and concrete storage tanks above or below ground.

PRACTICAL INFORMATION FOR ENVIROLINE 125U

Color	Green
Gloss Level	Not applicable
Volume Solids	100%
Typical Thickness	100-125 mils (2500-3125 microns) dry equivalent to 100-125 mils (2500-3125 microns) wet
Theoretical Coverage	13 sq.ft/US gallon at 125 mils d.f.t and stated volume solids 0.30 m²/liter at 3125 microns d.f.t and stated volume solids
Practical Coverage	Allow appropriate loss factors
Method of Application	Airless Spray, Plural Component Airless Spray

Drying Time

			Overcoating interval with self	
Temperature	**Touch Dry**	**Hard Dry**	*Minimum*	*Maximum*
59°F (15°C)	7 hours	12 hours[1]	11 hours	18 hours
77°F (25°C)	2 hours	3 hours[1]	3 hours	5 hours
95°F (35°C)	1 hour	2 hours[1]	2 hours	3 hours

[1] Sufficient coating film strength has developed to permit the handling and movement of coated steelwork. A Shore D hardness reading of 75-80 is a recommended guideline to indicate suitability for return to service.

REGULATORY DATA

Flash Point (Typical)	Part A 151°F (66°C); Part B 151°F (66°C); Mixed 151°F (66°C)	
Product Weight	11.3 lb/gal (1.36 kg/l)	
VOC	0.17 lb/gal (21 g/lt)	EPA Method 24
	47 g/kg	EU Solvent Emissions Directive (Council Directive 1999/13/EC)

See Product Characteristics section for further details

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SURFACE PREPARATION

All surfaces to be coated should be clean, dry and free from contamination. Prior to 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

Best performance will always be achieved when Enviroline 125U is applied to surfaces prepared by abrasive blast cleaning to Sa3 (ISO 8501-1:2007) or SSPC-SP5. Where Enviroline 125U is not to be used in high heat and/or aggressive service, preparation to Sa2½ (ISO 8501-1:2007) or SSPC-SP10 may be acceptable. A sharp, angular surface profile of 3-5 mils (75-125 microns) is recommended. Contact International Protective Coatings for further information.

Enviroline 125U must be applied before oxidation of the steel occurs. If oxidation does occur the entire oxidized 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.

The preferred method of holding the blast standard is by dehumidification. Alternatively, an approved holding primer may be used.

Concrete Substrates

Refer to International Protective Coatings for specific recommendations.

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	104°F (40°C) 12 minutes	
Plural component airless spray	Recommended	Refer to Enviroline Application Guidelines for more details.
Airless Spray	Suitable	Refer to Enviroline Application Guidelines for more details.
Air Spray (Pressure Pot)	Not suitable	
Brush	Suitable	Can be used for the touch-up of small areas or for stripe coating of welds and edges.
Roller	Not suitable	
Thinner	Not normally required	Refer to Enviroline Application Guidelines for specific advice.
Cleaner	Enviroline 71C / International GTA203	

Work Stoppages

Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with Enviroline 71C or International GTA203. 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 or International GTA203. It is good working practice to periodically flush out spray equipment during the course of the working day. Frequency should depend upon amount sprayed, temperature and elapsed time, including any delays.

All surplus material and empty containers should be disposed of in accordance with appropriate regional regulations/legislation.

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PRODUCT CHARACTERISTICS

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

This datasheet provides general guidance on the use of Enviroline 125U. Specific project requirements will be dependent upon the service end use and operating conditions of the tank or vessel. Always consult International Protective Coatings to confirm that Enviroline 125U is suitable for contact with the product to be stored.

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

Stripe coating is an essential part of good working practice and as such should form part of any lining specification.

For heavily pitted or porous steel, spray apply approximately 50% of the required film thickness and follow immediately with a short nap roller or squeegee to work material into the bottom of pitted areas.

For airless spray application, best results will be achieved when each component of the product is heated prior to application to 95-100°F (35-37°C). For plural component airless spray application, best results will be achieved when the product is heated prior to application; Part A (Resin) to a maximum of 140°F (60°C) and Part B (Hardener) to a maximum of 105°F (40°C).

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

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

	Substrate Temperature	Air Temperature
Preferred	70-120°F (21-49°C)	70-100°F (21-38°C)
Minimum	55°F (13°C)	55°F (13°C)

After the coating system has cured hard, the dry film thickness should be measured using a suitable non-destructive magnetic gauge to verify the minimum applied system thickness. The coating system should be free of all pinholes or other holidays. The cured film should be essentially free of runs, sags, drips, inclusions or other defects. All deficiencies and defects should be corrected. The repaired areas shall be retested and allowed to cure as specified before placing the finished lining into service.

Post-curing is not necessary for most applications, but Enviroline 125U may be post-cured to expedite curing or increase chemical resistance for extremely aggressive environments. Post-cure for a minimum of 2 hours at 250°F (121°C) or 6-8 hours at 150°F (66°C) for maximum resistance.

Maximum continuous dry temperature resistance for Enviroline 125U is 300ºF (149ºC).

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 color and normal manufacturing tolerances.

Low molecular weight reactive additives, which will form part of the film during normal ambient cure conditions, will also effect VOC values determined using EPA Method 24.

SYSTEMS COMPATIBILITY

Enviroline 125U should always be applied to correctly prepared substrates. When a primer is required as part of the coating specification, consult International Protective Coatings for specific advice.

Enviroline 125U is designed as a single coat system. It must only be overcoated with itself should re-coats or touch-up be required.

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

Proper ventilation must be provided during application and afterwards during curing (refer to product datasheets for typical curing times) to ensure safe limits and prevent fires and explosions. Forced extraction will be required in confined spaces. Ventilation and/or respiratory personal protective equipment (airfed hoods or appropriate cartridge masks) must be provided during application and curing. Take precautions to avoid skin and eye contact (overalls, gloves, goggles, masks, barrier cream, etc).

Before use, obtain, read and then follow the advice given on the Material Safety Data Sheets (Base and Curing Agent if two-pack) and the Health and Safety section of the Coatings Applications Procedures for this product.

In the event that 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.

The detailed safety measures are dependent on application methods and the work environment. If you do not fully understand these warnings and instructions or if you cannot strictly comply with them, do not use the product and consult International Protective Coatings.

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

PACK SIZE

Unit Size	Part A		Part B	
	Vol	Pack	Vol	Pack
20 liter	12 liter	20 liter	6 liter	10 liter
4 US gal	2.67 US gal	5 US gal	1.33 US gal	2 US gal

For availability of other pack sizes contact International Protective Coatings

SHIPPING WEIGHT (TYPICAL)

Unit Size	Part A	Part B
20 liter	18.6 kg	10.58 kg
4 US gal	37.1 lb	21.3 lb

STORAGE

Shelf Life	24 months minimum at 77°F (25°C). Subject to re-inspection thereafter. Store in dry, shaded conditions away from sources of heat and ignition.

Disclaimer

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.