

Epoxy Novolac Polysulphide

PRODUCT DESCRIPTION An ultra-high solids, two component polysulphide lining system utilising advanced epoxy novolac technology.

INTENDED USES Enviroline B-Flex 9450 uses epoxy novolac technology combined with polysulphide to give improved performance in a spray applied system:

- Crack bridging capability (elongation to break of up to 250%)
- High cohesive strength
- Wide range of chemical resistance
- Resistance to thermal shock, wear and impact
- Ultra-low VOC
- Single coat application

Applications include lining for concrete or steel surfaces that experience movement due to physical or mechanical forces, for example as a lining in bolted or riveted steel tanks. Enviroline B-Flex 9450 is also suitable for use in secondary containment, basins and sumps, sewer manholes and pipes, wet wells, digesters and clarifiers.

PRACTICAL INFORMATION FOR ENVIROLINE B-FLEX 9450

Colour	Tan			
Gloss Level	Not applicable			
Volume Solids	96% ± 2%			
Typical Thickness	3125-6250 microns (125-250 mils) dry equivalent to 3255-6510 microns (130.2-260.4 mils) wet			
Theoretical Coverage	0.30 m ² /litre at 3125 microns d.f.t and stated volume solids 12 sq.ft/US gallon at 125 mils d.f.t and stated volume solids			
Practical Coverage	Allow appropriate loss factors			
Method of Application	Trowel			
Drying Time				
			Overcoating Interval with recommended topcoats	
Temperature	Touch Dry	Hard Dry	<i>Minimum</i>	<i>Maximum</i>
25°C (77°F)	15 hours ¹	26 hours	18 hours	4 days ²

¹ Sufficient coating film strength has developed to permit the handling and movement of coated steelwork. A Shore D hardness reading of 50 is a recommended guideline to indicate suitability for return to service.

² If the maximum overcoating interval is exceeded it will be necessary to thoroughly abrade the surface of the lining with coarse emery paper.

REGULATORY DATA

Flash Point (Typical)	Mixed 66°C (151°F)		
Product Weight	1.29 kg/l (10.8 lb/gal)		
VOC	35 g/lit (0.29 lb/gal)	Calculated	

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 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

Abrasive blast clean to Sa2½ (ISO 8501-1:2007) or SSPC-SP10. If oxidation has occurred between blasting and application of Enviroline B-Flex 9450, the surface should be reblasted to the specified visual standard. Surface defects revealed by the blast cleaning process should be ground, filled, or treated in the appropriate manner.

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

Concrete Substrates

Refer to International Protective Coatings' Concrete Surface Preparation Guidelines for further information.

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	35°C (95°F) 50 minutes
Trowel	Recommended
Thinner	DO NOT THIN
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 Enviroline Application Guidelines should be consulted prior to use.

This datasheet provides general guidance on the use of Enviroline B-Flex 9450. 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 B-Flex 9450 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.

Enviroline B-Flex 9450 should be worked into the intended area with a trowel, tool or a caulking device so as to ensure complete contact with all surfaces intended (such as a chine, Enviroline B-Flex 9450 should have complete contact with wall and floor). Ensuring this complete contact with all surfaces can be accomplished using a variety of hand tools/trowels but must produce a smooth, consistent and even thickness. The desired thickness would be 3/16" and applied to a coved effect, redeucing a 90° angle to a less severe angle.

Tools/trowels that have been employed on projects include; cutting blast shields or other plastic items to the desired curvature to ensure proper thickness. Other tools/trowels have been plastic bottle, cake decorating knives, scrapers (plastic and metal) and plastic piping, among a few. It is imperative that the tool/trowel implement produces the consistency required to make an adequate application and force the caulk into the intended area.

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	13°C (55°F)	13°C (55°F)

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.

Maximum continuous dry temperature resistance for Enviroline B-Flex 9450 is 93°C (200°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

Enviroline B-Flex 9450 is compatible with a wide range of Enviroline linings. Please refer to the project coating specification for details.

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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 Material Safety Data Sheet and the container(s), and should not be used without reference to the Material Safety Data Sheet (MSDS) which International Protective Coatings has provided to its customers.

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
	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	
	4 US gal	31.6 lb		17.3 lb	
STORAGE	Shelf Life	24 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.

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