

## Epoxy Novolac

**PRODUCT DESCRIPTION** A 100% solids, two-component epoxy novolac tank lining with excellent chemical and solvent resistance.

**INTENDED USES** Devmat 111 can be used for lining storage tanks containing strong solvents, such as ethyl alcohol, toluene and xylene. May also be used for repair or lining of storage tank bottoms, floating roofs or fixed roofs and rebuilding of pitted steel surfaces.

It has excellent wetting of glass mat and chopped glass fibre and may be applied up to 1/2" thick on horizontal surfaces.

### PRACTICAL INFORMATION FOR DEVMAT 111

<b>Colour</b>	Buff, Mist Grey			
<b>Gloss Level</b>	Gloss			
<b>Volume Solids</b>	100%			
<b>Typical Thickness</b>	250 microns (10 mils) dry equivalent to 250 microns (10 mils) wet			
<b>Theoretical Coverage</b>	4 m <sup>2</sup> /litre at 250 microns d.f.t and stated volume solids 160 sq.ft/US gallon at 10 mils d.f.t and stated volume solids			
<b>Practical Coverage</b>	Allow appropriate loss factors			
<b>Method of Application</b>	Airless Spray, Roller, Squeegee, Plural Component Airless Spray			
<b>Drying Time</b>	Overcoating Interval with recommended topcoats			
<b>Temperature</b>	<b>Touch Dry</b>	<b>Hard Dry</b>	<i>Minimum</i>	<i>Maximum</i>
10°C (50°F)	*1	32 hours	25 hours	72 hours
20°C (68°F)	*1	22 hours	14 hours	72 hours
25°C (77°F)	*1	18 hours	10 hours	72 hours
*1 * not applicable				

**REGULATORY DATA**

**Flash Point (Typical)** Part A 93°C (199°F); Part B 93°C (199°F); Mixed 93°C (199°F)

**Product Weight** 1.77 kg/l (14.8 lb/gal)

**VOC** 0.60 lb/gal (72 g/lt) EPA Method 24

See Product Characteristics section for further details

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### SURFACE PREPARATION

Surfaces must be dry, clean, free of oil, grease, form release agents, curing compounds, laitance, other foreign matter and be structurally sound. Remove all loose paint, mortar spatter, mill scale, and rust.

#### New Surfaces:

##### Steel

Devmat 111 may be applied directly to abrasive blasted steel or over a primer coat of Devran 201H primer or other suitable primer. In either case, the steel surface must be blasted to near-white metal surface cleanliness in accordance with SSPC-SP10 or ISO-Sa2½ for immersion service. Blast profile on steel should be 38-62 microns (1.5 – 2.5 mils) in depth and be of a sharp, jagged, nature as opposed to a “peen” pattern (from shot blasting). Surfaces must be free of grit dust.

##### Concrete Floors, Poured Concrete:

Cure at least 30 days. Acid etch or abrasive blast slick, glazed concrete or concrete with laitance. Prime with Pre-Prime 167 or Devmat 111

##### Previously Painted Surfaces

Devmat 111 may not be applied to existing coatings. All coatings must be removed by abrasive blast cleaning to the standard required for new surfaces.

### APPLICATION

<b>Mixing</b>	Material is supplied in two containers as a unit. Once the unit has been mixed it must be used within the working pot life specified. (1) Agitate Base (Part A) with a power agitator. (2) Combine entire contents of Curing Agent (Part B) with Base (Part A) and mix thoroughly with power agitator.	
<b>Mix Ratio</b>	3 part(s) : 1 part(s) by volume	
<b>Working Pot Life</b>	10°C (50°F)	20°C (68°F) 25°C (77°F) 90 minutes 90 minutes 90 minutes
<b>Plural Component Airless Spray</b>	Recommended	Use suitable proprietary equipment
<b>Airless Spray</b>	Recommended	Tip Range 0.58-0.73 mm (23-29 thou) Total output fluid pressure at spray tip not less than 211 kg/cm <sup>2</sup> (3000 p.s.i.) See Product Characteristics section for further details
<b>Brush</b>	Suitable	Multiple coats may be required to achieve specified film thickness.
<b>Roller</b>	Suitable	Multiple coats may be required to achieve specified film thickness.
<b>Thinner</b>	Do not thin	
<b>Cleaner</b>	T-10 Thinner	In the SCAQMD region, use T-0 Thinner or other solvent in compliance with local VOC and air quality regulations.
<b>Work Stoppages</b>	Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with T-10 Thinner (outside of SCAQMD) or #4267 solvent (inside SCAQMD). 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.	
<b>Clean Up</b>	Clean all equipment immediately after use with T-10 Thinner (outside of SCAQMD) or #4267 solvent (inside SCAQMD). It is good working practice to periodically flush out spray equipment during the course of the working day. Frequency of cleaning will 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

#### Advantages:

- Excellent wetting of glass mat and chopped glass fibres
- Excellent chemical, solvent and water resistance
- Resistant to aromatic solvents including xylene, toluene, gasoline, methyl tertiary-butyl ether and caustic solutions
- May be applied using conventional airless equipment
- Ideal for secondary containment
- Resistant to immersion in ethyl alcohol and ethyl alcohol containing gasoline.

In common with all epoxies Devmat 111 will chalk and discolour on exterior exposure. However, these phenomena are not detrimental to anti-corrosive performance.

Optimum application properties and working life of the coating are obtained when the mixed components are at 77°F (25°C).

Minimum application temperature is 10°C (50°F). At extreme temperatures, efforts should be made to maintain mixed material at 25°C (77°F). At temperatures above 25°C (77°F) pot life will be dramatically shortened and plural component equipment should be considered.

Where airless spray equipment is used, a 45:1 pump or larger is recommended. Ideally, fluid hoses should not be less than 3/8" ID and not longer than 50 feet to obtain optimum results.

Devmat 111 can also be applied with a spreader, squeegee or roller.

When applying Devmat 111 by brush or roller, it may be necessary to apply multiple coats to achieve the required film build and uniform opacity.

A minimum of seven days cure with ventilation at temperatures above 25°C (77°F) should be allowed before tank linings are put into service. Longer curing times with ventilation are required if temperatures are lower than 25°C (77°F).

Do not allow coating to remain in the application equipment longer than 1.45 hours. Flush out all application equipment whenever there is a delay in application.

It is very important for the safety of the applicator and the proper performance of Devmat 111 that good ventilation be provided to all portions of the enclosed area. It is equally important to bring into the enclosed area dry, fresh air to remove all solvent vapors. Since all solvent vapors are heavier than air, ventilation ducts should reach to the lowest portions of the enclosed areas as well as into any structural pockets. Ventilation should be provided throughout the cure period to ensure all the solvents are removed from the coating.

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

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Devmat 111 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.

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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](http://www.international-pc.com):

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

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.

PACK SIZE	Unit Size	Part A		Part B	
		Vol	Pack	Vol	Pack
	5 US gal	3 US gal	5 US gal	1 US gal	1 US gal
	1 US gal	0.75 US gal	1 US gal	0.25 US gal	1 US quart
For availability of other pack sizes, contact International Protective Coatings.					
SHIPPING WEIGHT (TYPICAL)	Unit Size	Part A		Part B	
	5 US gal	48.1 lb		15.9 lb	
	1 US gal	15 lb		4 lb	
STORAGE	Shelf Life	24 months minimum at 25°C (77°F). 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](http://www.international-marine.com) or [www.international-pc.com](http://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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