

## Epoxy Novolac

### PRODUCT DESCRIPTION

A high solids, chemical resistant lining system with exceptional resistance to a wide range of chemicals and solvents.

### INTENDED USES

Ideal for industrial storage and process chemical tanks and pipelines, high pressure crude oil pipes, separation tanks and rail cars. Also used as a protective coating for highly corrosive environments.

Provides exceptional resistance over a wide range of temperatures and pressures.

### PRACTICAL INFORMATION FOR DEVCHEM 253

<b>Color</b>	Off White, Tank Gray, Pastel Red, Pale Blue
<b>Gloss Level</b>	Semi Gloss
<b>Volume Solids</b>	72% ± 2%
<b>Typical Thickness</b>	4-6 mils (100-150 microns) dry equivalent to 5.6-8.3 mils (139-208 microns) wet
<b>Theoretical Coverage</b>	231 sq.ft/US gallon at 5 mils d.f.t and stated volume solids 5.80 m <sup>2</sup> /liter at 125 microns d.f.t and stated volume solids
<b>Practical Coverage</b>	Allow appropriate loss factors
<b>Method of Application</b>	Airless Spray, Air Spray, Brush

### Drying Time

Temperature	Touch Dry	Hard Dry	Overcoating Interval with recommended topcoats	
			Minimum	Maximum
50°F (10°C)	7.5 hours	20 hours	24 hours	6 days
59°F (15°C)	6 hours	16 hours	16 hours	5 days
77°F (25°C)	4 hours	7 hours	7 hours	60 hours
104°F (40°C)	2 hours	3 hours	3 hours	24 hours

### REGULATORY DATA

<b>Flash Point (Typical)</b>	Part A 100°F (38°C); Part B 100°F (38°C); Mixed 100°F (38°C)	
<b>Product Weight</b>	11.6 lb/gal (1.39 kg/l)	
<b>VOC</b>	1.77 lb/gal (213 g/lt)	EPA Method 24

See Product Characteristics section for further details

## Protective Coatings

## Epoxy Novolac

### SURFACE PREPARATION

#### Steel Substrates

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 smooth weld seams and sharp edges.

Abrasive blast to minimum SSPC-SP10 or ISO8501-1:2007 Sa2½. The blast profile should be jagged rather than "peened" and between 1.5 to 2.5 mils (38-62 microns). After blasting, vacuum or blow off all abrasive dust and ensure surface remains clean before painting.

#### 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 Devchem 253

#### Previously Painted Surfaces

Devchem 253 may not be applied to existing coatings. All coatings should be removed by abrasive blast cleaning to a minimum standard of SSPC SP10, ISO8501-1:2007 Sa2½.

### APPLICATION

<b>Mixing</b>	<p>Material is supplied in two containers as a unit. Always mix a complete unit in the proportions supplied. Once the unit has been mixed it must be used within the working pot life specified.</p> <p>(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.</p> <p>Allow the mixed material to stand 15 minutes at 60-80°F (16-27°C) before use. This is not applicable for plural component application.</p>			
<b>Mix Ratio</b>	4 part(s) : 1 part(s) by volume			
<b>Working Pot Life</b>	50°F (10°C) 8.5 hours	59°F (15°C) 6 hours	77°F (25°C) 3 hours	104°F (40°C) 1 hour
<b>Airless Spray</b>	Recommended	Tip Range 19-25 thou (0.48-0.64 mm) Total output fluid pressure at spray tip not less than 3000 psi (211 kg/cm <sup>2</sup> ) See Product Characteristics section for further details		
<b>Air Spray (Conventional)</b>	Recommended	Use a fluid tip of 0.070" (1.78mm') or larger, a professional grade conventional gun and an air cap with good break-up. The fluid pressure should be kept low, with just enough air pressure to get good break-up of the coating.		
<b>Brush</b>	Suitable			
<b>Roller</b>	Suitable			
<b>Thinner</b>	Not normally required	See Product Characteristics section for further details		
<b>Cleaner</b>	International GTA220. or International GTA610			
<b>Work Stoppages</b>	Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with International GTA220 or International GTA610. 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 International GTA220 or International GTA610. 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 materials and empty containers should be disposed of in accordance with appropriate regional regulations/legislation.			

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### PRODUCT CHARACTERISTICS

#### Advantages:

- Excellent chemical resistance under ambient cure conditions
- Does not require baking to cure
- High volume solids; low VOC
- Exceptional resistance to a wide variety of chemicals and solvents
- High gloss provides easy cleaning

Coating System: Two coats of Devchem 253 at 5-6 mils (125-150 microns) per coat or three coats at 4-5 mils (100-125 microns) per coat. Use contrasting colors for each coat and stripe coat. Two stripe coats on all sharp edges, cutouts and welds. Note: The maximum dry film thickness of the Devchem 253 system is 18 mils (450 microns). Dry film thickness above 18 mils (450 microns) could reduce the service life of the coating. Cure to put tank into service: 7 days with ventilation at 77°F (25°C) for maximum chemical resistance. If forced heat cure is desired, contact International Paint Protective Coatings.

Contact International Protective Coatings for specific cargo resistance properties.

In common with all epoxies, Devchem 253 will chalk and discolor on exterior exposure. However, these phenomena are not detrimental to anti-corrosive performance.

Not recommended for immersion in inorganic acids.

Must not be applied over any shop or pre-construction primers.

Ideally, fluid hoses should not be less than 3/8" ID and not longer than 50 feet to obtain optimum results. Longer hose length may require an increase in pump capacity, pressure, and/or thinning.

Thinning is not normally required or desirable. However, at lower temperatures, small amounts (5% or less) of International GTA220 or International GTA610 can be added to the mixed components depending on local VOC and air quality regulations.

Ventilation: It is very important for the safety of the applicator and the proper performance of the Devchem 253 that good ventilation be provided to all portions of the enclosed area. Recommended tank ventilation involves two important phases. Phase one is to pump fresh, dehumidified air into all areas of the tank, especially "dead air" areas. Phase two is to exhaust, via an explosion proof exhaust fan, the solvent vapors from the lowest portion of the tank. This practice of pumping fresh air into the tank and exhausting solvent vapors out of the lowest part of the tank should be provided throughout the application and curing processes. This practice is to insure that all solvents are removed from the coating. Tanks must be cured 7 days at 77°F (25°C) with ventilation before being put into service. At lower temperatures, longer cure times are required.

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.

### SYSTEMS COMPATIBILITY

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Devchem 253 is designed to be topcoated with itself.

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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 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.

PACK SIZE	Unit Size	Part A		Part B	
		Vol	Pack	Vol	Pack
	5 US gal	4 US gal	6 US gal	1 US gal	1 US gal
For availability of other pack sizes contact International Protective Coatings					
SHIPPING WEIGHT (TYPICAL)	Unit Size	Part A		Part B	
		52.1 lb		10 lb	
	5 US gal				
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](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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