Devchem® 256

Epoxy Novolac

PRODUCT DESCRIPTION

A chemical resistant tank lining and protective coating for highly corrosive environments.

INTENDED USES

Use for industrial storage and process chemical tanks and pipelines. Ideal for crude immersion in tanks, treaters, separators, and flare knockouts up to 300°F (149°C).

PRACTICAL INFORMATION FOR DEVCHEM 256

Color	Off White
Gloss Level	Semi-gloss
Volume Solids	72 ± 2%%
Typical Thickness	5-6 mils (125-150 microns) dry equivalent to 7-8.3 mils (174-208 microns) wet
Theoretical Coverage	210 sq.ft/US gallon at 5.5 mils d.f.t and stated volume solids 5.20 m²/liter at 137.50 microns d.f.t and stated volume solids
Practical Coverage	Allow appropriate loss factors
Method of Application	Airless Spray, Air Spray, Brush

Drying Time

			Overcoating Interval with recommended topcoats	
Temperature	**Touch Dry**	**Hard Dry**	*Minimum*	*Maximum*
50°F (10°C)	8 hours	22 hours	24 hours	6 days
59°F (15°C)	6.5 hours	18 hours	20 hours	5 days
77°F (25°C)	4 hours	7 hours	7 hours	60 hours
104°F (40°C)	2.5 hours	3.5 hours	3 hours	24 hours

REGULATORY DATA

Flash Point (Typical)	Part A 100°F (38°C); Part B 90°F (32°C); Mixed 100°F (38°C)	
Product Weight	13.6 lb/gal (1.63 kg/l)	
VOC	2.66 lb/gal (319 g/lt)	EPA Method 24

See Product Characteristics section for further details

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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.

Previously Painted Surfaces

Devchem 256 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

Mixing

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.

(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.

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.

Mix Ratio

4 part(s) : 1 part(s) by volume

Working Pot Life

50°F (10°C)	59°F (15°C)	77°F (25°C)	104°F (40°C)
9 hours	6.5 hours	4 hours	1.5 hours

Airless Spray	Recommended	Tip Range 15-23 thou (0.38-0.58 mm) Use 100 psi air pressure, 3/8" ID fluid hoses not exceeding 100 feet in length and a 30:1 or larger heavy duty air assisted airless pump.
Air Spray (Conventional)	Suitable	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.
Brush	Suitable	
Roller	Suitable	
Thinner	Not normally required	See Product Characteristics section for further details
Cleaner	T-10 Thinner	

Work Stoppages

Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with T-10 Thinner. 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 T-10 Thinner. 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:

- Exceptional resistance to a wide range of chemicals and solvents
- Ideal for industrial storage and process chemical tanks and pipelines, especially in crude immersion where elevated temperatures and pressures are involved
- Utilises conventional application properties and cure schedules
- Does not require baking to cure
- High volume solids; two coat system

Coating System: Two coats of Devchem 256 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 256 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 77ºF (25ºC) for maximum chemical resistance. If forced heat cure is desired, contact International Paint Protective Coatings.

In common with all epoxies, Devchem 256 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.

Thinning is not normally required or desirable. However, at lower temperatures, small amounts (5% or less) of T-10 Thinner 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 256 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 77ºF (25ºC) 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

Devchem 256 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:

- 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	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	
	5 US gal	59.1 lb		14.8 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