

Water Based Acrylic

PRODUCT DESCRIPTION A low VOC, single component, rust inhibitive water borne acrylic for use as a primer or finish applied directly to properly prepared metal, concrete or wood surfaces.

INTENDED USES For exposure in a wide variety of environments including offshore structures, bridges, refineries, petrochemical and chemical plants.

PRACTICAL INFORMATION FOR DEVCRYL 1440

Colour	White, Black. Range of colours via the Chromascan system
Gloss Level	Matt
Volume Solids	44%
Typical Thickness	50-75 microns (2-3 mils) dry equivalent to 114-170 microns (4.6-6.8 mils) wet
Theoretical Coverage	8.80 m ² /litre at 50 microns d.f.t and stated volume solids 353 sq.ft/US gallon at 2 mils d.f.t and stated volume solids
Practical Coverage	Allow appropriate loss factors
Method of Application	Airless Spray, Air Spray, Brush, Roller
Drying Time	

Temperature	Touch Dry	Hard Dry	Overcoating Interval with recommended topcoats	
			Minimum	Maximum
10°C (50°F)	1 hour	2 hours	2 hours	Extended ¹
15°C (59°F)	1 hour	2 hours	2 hours	Extended ¹
25°C (77°F)	30 minutes	1 hour	1 hour	Extended ¹
40°C (104°F)	30 minutes	1 hour	1 hour	Extended ¹

¹ See International Protective Coatings Definitions and Abbreviations

REGULATORY DATA

Flash Point (Typical)	>101°C (>214°F)	
Product Weight	1.31 kg/l (10.9 lb/gal)	
VOC	0.64 lb/gal (77 g/lt) 43 g/lt (0.35 lb/gal) 93 g/lt (0.77 lb/gal)	EPA Method 24 (Calculated) (water reduced)

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.

Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

Abrasive Blast Cleaning

Abrasive blast clean to Sa2½ (ISO 8501-1:2007) or SSPC-SP6. If oxidation has occurred between blasting and application of Devcryl 1440, 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.

Primed Surfaces

Devcryl 1440 can be applied over approved anti-corrosive primers. The primer surface should be dry and free from all contamination and Devcryl 1440 must be applied within the overcoating intervals specified (consult the relevant product data sheet).

Areas of breakdown, damage etc., should be prepared to the specified standard (e.g. Sa2½ (ISO 8501-1:2007) or SSPC-SP6 Abrasive Blasting, or SSPC-SP11, Power Tool Cleaning) and patch primed prior to the application of Devcryl 1440.

Concrete Surfaces

Concrete should be cured for a minimum of 28 days prior to coating. The moisture content of the concrete should be below 6%. All surfaces should be clean, dry and free from curing compounds, release agents, trowelling compounds, surface hardeners, efflorescence, grease, oil, dirt, old coatings and loose or disintegrating concrete. All poured and precast concrete must also be sweep blasted (preferred) or acid etched to remove laitence.

Devcryl 1440 is also suitable for application onto fibreglass and wood substrates. Contact International Protective Coatings for further details.

APPLICATION

Mixing	This material is a one component coating and should always be mixed thoroughly with a power agitator before application.		
Mix Ratio	Not applicable		
Airless Spray	Recommended	Tip Range 0.38-0.53 mm (15-21 thou) Total output fluid pressure at spray tip not less than 126 kg/cm ² (1792 p.s.i.)	
Air Spray (Pressure Pot)	Recommended	Gun	DeVilbiss MBC or JGA
		Air Cap	704 or 765
		Fluid Tip	E
Brush	Suitable	Typically 30-50 microns (1.2-2.0 mils) can be achieved	
Roller	Suitable	Typically 30-50 microns (1.2-2.0 mils) can be achieved	

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PRODUCT CHARACTERISTICS

Apply by air or airless spray. Thoroughly flush equipment with water or alcohol prior to use. To obtain maximum edge protection and film build, airless or air spray application is recommended. Application by other methods, e.g. brush or roller, may require more than one coat.

With all water based coatings careful control of application conditions is required to ensure good long term performance. International Protective Coatings have available a set of working procedures relating to the application of water borne paints which is available on request.

The following basic parameters must be adhered to:

Devcryl 1440 must be protected from freezing at all times during storage.

The minimum steel temperature for application must be above 10°C (50°F), and be at least 3°C (5°F) above dew point.

Good airflow is essential around the object being painted [minimum air speed 0.1m/sec (4 inches/sec)].

Minor areas which are difficult to ventilate should be brush applied to prevent over-application.

Application below the minimum film forming temperature (M.F.F.T.) of the coating and/or poor ventilation will result in poor film coalescence and a powdery cracked film which will require removal and re-application.

Level of sheen and surface finish are dependent on application method. Avoid using a mixture of application methods whenever possible.

For brush and roller application, and in some colours, two coats of Devcryl 1440 may be required to give uniform coverage.
Devcryl 1440 must be fully hardened before exposing to ponding water otherwise adhesion loss can occur.

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

Devcryl 1440 has been designed for use as a primer or finish.

Devcryl 1440 can be applied over the following:

Devprime 1407

The following topcoats are recommended for Devcryl 1440:

Devcryl 1440
Devcryl 1449

For other suitable primers/topcoats consult International Protective Coatings.

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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	
	Vol	Pack
	1 US gal	1 US gal
	5 US gal	5 US gal
For availability of other pack sizes, contact International Protective Coatings.		
SHIPPING WEIGHT (TYPICAL)	Unit Size	
	1 US gal	11.5 lb
	5 US gal	57.7 lb
STORAGE	Shelf Life	12 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.

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