Intercryl® 520

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 INTERCRYL 520

Color	Red, White. Range of colors via the Chromascan system.
Gloss Level	Matte
Volume Solids	44%
Typical Thickness	2 mils (50 microns) dry equivalent to 4.6 mils (114 microns) wet
Theoretical Coverage	353 sq.ft/US gallon at 2 mils d.f.t and stated volume solids 8.80 m²/liter at 50 microns d.f.t and stated volume solids
Practical Coverage	Allow appropriate loss factors
Method of Application	Airless Spray, Air Spray, Brush, Roller

Drying Time

			Overcoating interval with self	
Temperature	**Touch Dry**	**Hard Dry**	*Minimum*	*Maximum*
50°F (10°C)	1 hour	2 hours	2 hours	Extended[1]
59°F (15°C)	1 hour	2 hours	2 hours	Extended[1]
77°F (25°C)	30 minutes	1 hour	1 hour	Extended[1]
104°F (40°C)	30 minutes	1 hour	1 hour	Extended[1]

[1] See International Protective Coatings Definitions & Abbreviations

REGULATORY DATA

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

Coating hazard marker GB 30981.2-W-Pb ≤1000-NC Qualified for GB 30981.2-2025

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 8504:2019.

Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning. Strict adherence to all cleanliness standards is essential for application of water based coatings.

Abrasive Blast Cleaning
Abrasive blast clean to SSPC-SP6 or Sa2½ (ISO 8501-1:2007). If oxidation has occurred between blasting and application of Intercryl 520, 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
Intercryl 520 can be applied over approved anti-corrosive primers. The primer surface should be dry and free from all contamination and Intercryl 520 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 Intercryl 520.

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.

Intercryl 520 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 15-21 thou (0.38-0.53 mm) Total output fluid pressure at spray tip not less than 1792 psi (126 kg/cm²)	
Air Spray (Pressure Pot)	Recommended	Gun Air Cap Fluid Tip	DeVilbiss MBC or JGA 704 or 765 E
Brush	Suitable	Typically 1.2-2.0 mils (30-50 microns) can be achieved	
Roller	Suitable	Typically 1.2-2.0 mils (30-50 microns) can be achieved	

Thinner
Water (clean)/International GTA991

Cleaner
Water (clean)/International GTA991

Work Stoppages
Thoroughly flush all equipment with International GTA991. All unused material should be stored in tightly closed containers. Partially filled containers may show surface skinning and/or a viscosity increase of the material after storage. Material should be filtered prior to use.

Clean Up
Clean all equipment immediately after use with clean water followed by International GTA991. It is good working practice to periodically flush out spray equipment during the course of the working day. Frequency should 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/legialation.

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PRODUCT CHARACTERISTICS

Apply by air or airless spray. Thoroughly flush equipment with International GTA991 thinner, or alcohol, followed by water 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 a set of working procedures relating to the application of water borne paints which are available on request.

The following basic parameters must be adhered to:

Intercryl 520 must be protected from freezing at all times during storage.

The minimum steel temperature for application must be above 50°F (10°C), and be at least 5°F (3°C) above dew point. The relative humidity should be lower than 70% otherwise drying and overcoating times will be severely extended.

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

Minor areas that 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 will result in a powdery cracked film which will require removal and re-application.

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

For brush and roller application, and in some colors, two coats of Intercryl 520 may be required to give uniform coverage.

Intercryl 520 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 color and normal manufacturing tolerances.

SYSTEMS COMPATIBILITY

Intercryl 520 has been designed for use as a primer or finish.

Intercryl 520 can be applied over a wide range of primers:

Water borne:

- Intergard 270
- InterH2O 401
- InterH2O 280

Solvent borne:

- Intercure 200
- Intercure 420
- Intergard 251
- Intergard 269
- Intergard 475HS
- Interprime 198
- Interseal 670HS
- Interzinc 12*
- Interzinc 22*
- Interzinc 42
- Interzinc 52
- Interzinc 315

*mist coat may be required

The following topcoats are recommended for Intercryl 520:

- Intercryl 520
- Intercryl 530

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
- Water Borne Coatings Recommended Working Procedures

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 AkzoNobel for further advice.

PACK SIZE	Unit Size	Vol	Pack
	5 US gal	5 US gal	5 US gal
	For availability of other pack sizes, contact AkzoNobel.		
SHIPPING WEIGHT (TYPICAL)	Unit Size		
	5 US gal	57.7 lb	
	Non Hazardous		
STORAGE	Shelf Life	12 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.

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