

Aliphatic Polyurethane

PRODUCT DESCRIPTION

A low VOC, two component modified acrylic polyurethane finish giving excellent durability and long-term recoatability, for use over correctly prepared primed surfaces. This product is also HAPS free and exempt solvent free.

International Paint also offers Interthane 990V in a mildew resistant, bright white finish. Contact your International Paint representative for additional information.

INTENDED USES

Suitable for use in both new construction and as a maintenance finish which can be used in a wide variety of environments including offshore structures, chemical and petrochemical plants, bridges, pulp and paper mills, and in the power industry.

PRACTICAL INFORMATION FOR INTERTHANE 990V

Color	Wide range via the Chromascan® system
Gloss Level	High Gloss
Volume Solids	71% ± 3%
Typical Thickness	2-3 mils (50-75 microns) dry equivalent to 2.8-4.2 mils (70-106 microns) wet
Theoretical Coverage	569 sq.ft/US gallon at 2 mils d.f.t and stated volume solids 14.20 m ² /liter at 50 microns d.f.t and stated volume solids
Practical Coverage	Allow appropriate loss factors

Method of Application Air spray, Airless spray, Conventional Spray, Brush, Roller

Drying Time

Temperature	Touch Dry	Hard Dry	Overcoating Interval with recommended topcoats	
			Minimum	Maximum
50°F (10°C)	7.5 hours	14 hours	14 hours	Extended ¹
59°F (15°C)	5 hours	8 hours	8 hours	Extended ¹
77°F (25°C)	2.5 hours	4 hours	4 hours	Extended ¹
104°F (40°C)	45 minutes	1.5 hours	2 hours	Extended ¹

¹ See International Protective Coatings Definitions & Abbreviations

REGULATORY DATA **Flash Point (Typical)** Part A 97°F (36°C); Part B >212°F (>100°C) ; Mixed 97°F (36°C)

Product Weight 11.5 lb/gal (1.38 kg/l)

VOC 2.01 lb/gal (241 g/l) EPA Method 24
178 g/kg EU Solvent Emissions Directive (Council Directive 1999/13/EC)

See Product Characteristics section for further details

Protective Coatings

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SURFACE PREPARATION

All surfaces to be coated should be clean, dry and free from contamination. Prior to application, all surfaces should be assessed and treated in accordance with ISO 8504:2000.

Primed Surfaces

Interthane 990V should always be applied over a recommended anti-corrosive coating scheme. The primer surface should be dry and free from all contamination, and Interthane 990V 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 Interthane 990V.

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) Mix the 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.			
Mix Ratio	4 parts : 1 part by volume			
Working Pot Life	50°F (10°C) 6 hours	59°F (15°C) 4 hours	77°F (25°C) 3 hours	104°F (40°C) 1 hour
Airless Spray	Recommended	Tip Range 13-17 thou (0.33-0.43 mm) Total output fluid pressure at spray tip not less than 2204 psi (155 kg/cm ²)		
Air Spray (Pressure Pot)	Suitable	Gun Air Cap Fluid Tip	DeVilbiss MBC or JGA 704 or 765 E	
Air Spray (Conventional)	Suitable	Use suitable proprietary equipment.		
Brush	Suitable	Typically 2.0-3.0 mils (50-75 microns) can be achieved		
Roller	Suitable	Typically 2.0-3.0 mils (50-75 microns) can be achieved		
Thinner	International GTA028 International GTA123 International GTA056	Exempt solvent in USA Use of GTA056 will add small amounts of VOC and HAPS (Hazardous Air Polluting Solvents) Do not thin more than allowed by local environmental legislation		
Cleaner	International GTA123			
Work Stoppages	Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with International GTA123. 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 International GTA123. 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 Level of sheen and surface finish are dependent on application method. Avoid using a mixture of application methods whenever possible. Best results in terms of gloss and appearance will usually be obtained by airless spray application.

In some colors, two coats of Interthane 990V may be required to give uniform coverage, especially when applying Interthane 990V over dark undercoats, and when using certain lead free bright colors such as yellows and oranges. Best practice is to use a color-compatible intermediate or anti-corrosive coating under Interthane 990V.

When overcoating after weathering, or aging, ensure the coating is fully cleaned to remove all surface contamination such as oil, grease, salt crystals and traffic fumes, before application of a further coat of Interthane 990V. Absolute measured adhesion of topcoats to aged Interthane 990V is less than that to fresh material, however, it is adequate for the specified end use.

Surface temperature must always be a minimum of 5°F (3°C) above dew point. When applying Interthane 990V in confined spaces, ensure adequate ventilation. Condensation occurring during or immediately after application may result in a matte finish and an inferior film.

Premature exposure to ponding water will cause color change, especially in dark colors and at low temperatures.

This product must only be thinned using the recommended International thinners. The use of alternative thinners, particularly those containing alcohols, can severely affect the curing mechanism of the coating.

This product is not recommended for use in immersion conditions. When severe chemical or solvent splashing is likely to occur, contact International Protective Coatings for information regarding suitability.

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

The following primers/intermediates are recommended for Interthane 990V:

Intercure 200HS	Interplus 256
Intergard 251	Interplus 356
Intergard 345	Interseal 670HS*
Intergard 475HS	Interzinc 52
Intershield 300	Interzone 505
Intershield 300HS	Interzone 954
Intershield 300V	

Interthane 990V is designed to be topcoated with itself.

*Note: When overcoating Interseal 670HS, a 7 day maximum overcoating interval must be adhered to.

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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.

Warning: Contains isocyanate. Wear air-fed hood for spray application.

PACK SIZE	Unit Size	Part A		Part B	
		Vol	Pack	Vol	Pack
	5 US gal	4 US gal	5 US gal	1 US gal	1 US gal
	1 US gal	0.8 US gal	1 US gal	0.2 US gal	0.25 US gal
For availability of other pack sizes contact International Protective Coatings					
SHIPPING WEIGHT (TYPICAL)	Unit Size	Part A		Part B	
	5 US gal	51.4 lb		10.5 lb	
	1 US gal	10.4 lb		2.3 lb	
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.

This Technical Data Sheet is available on our website at www.international-marine.com or 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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