

## Polyurethane

### PRODUCT DESCRIPTION

A low VOC, two component acrylic polyurethane high performance finish coat with excellent gloss and colour retention on exterior exposure, for use over correctly prepared primed surfaces.

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

### INTENDED USES

As a durable high gloss finish coat for exposed steelwork in a wide range of aggressive environments, including chemical and petrochemical plants, offshore structures, bridges, pulp and paper mills, power plants and refineries.

For use over correctly prepared primed steel and masonry surfaces in both new construction and maintenance situations.

Exhibits superior application properties, environmental durability and chemical resistance. Gives excellent gloss and colour retention on exterior exposure.

### PRACTICAL INFORMATION FOR INTERTHANE 990UHS

<b>Colour</b>	Wide range via the Chromascan system
<b>Gloss Level</b>	High Gloss
<b>Volume Solids</b>	72%
<b>Typical Thickness</b>	75-100 microns (3-4 mils) dry equivalent to 104-139 microns (4.2-5.6 mils) wet
<b>Theoretical Coverage</b>	9.60 m <sup>2</sup> /litre at 75 microns d.f.t and stated volume solids 385 sq.ft/US gallon at 3 mils 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, Roller
<b>Drying Time</b>	

<b>Temperature</b>	<b>Touch Dry</b>	<b>Hard Dry</b>		
10°C (50°F)	3 hours	26 hours	26 hours	Extended <sup>1</sup>
15°C (59°F)	2 hours	18 hours	18 hours	Extended <sup>1</sup>
25°C (77°F)	1 hour	5 hours	6 hours	Extended <sup>1</sup>
40°C (104°F)	30 minutes	3 hours	3 hours	Extended <sup>1</sup>

<sup>1</sup> See International Protective Coatings Definitions and Abbreviations

### REGULATORY DATA

<b>Flash Point (Typical)</b>	Part A 42°C (108°F); Part B 24°C (75°F); Mixed 42°C (108°F)		
<b>Product Weight</b>	1.4 kg/l (11.7 lb/gal)		
<b>VOC</b>	2.06 lb/gal (247 g/lt)	EPA Method 24	

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 application all surfaces should be assessed and treated in accordance with ISO 8504:2000

### Primed Surfaces

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

### APPLICATION

<b>Mixing</b>	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) Agitate Curing Agent (Part B) with a power agitator. (3) Combine entire contents of Curing Agent (Part B) with Base (Part A) and mix thoroughly with power agitator.			
<b>Mix Ratio</b>	3 part(s) : 1 part(s) by volume			
<b>Working Pot Life</b>	10°C (50°F) 5 hours	15°C (59°F) 3.5 hours	25°C (77°F) 1.5 hours	40°C (104°F) 30 minutes
<b>Airless Spray</b>	Recommended	Tip Range 0.38-0.48 mm (15-19 thou) Total output fluid pressure at spray tip not less than 141 kg/cm <sup>2</sup> (2005 p.s.i.)		
<b>Air Spray (Pressure Pot)</b>	Recommended	Gun Air Cap Fluid Tip	DeVilbiss MBC or JGA 704 or 765 E	
<b>Air Spray (Conventional)</b>	Recommended	Use suitable proprietary equipment		
<b>Brush</b>	Suitable	Typically 40-50 microns (1.6-2.0 mils) can be achieved		
<b>Roller</b>	Suitable	Typically 40-50 microns (1.6-2.0 mils) can be achieved		
<b>Thinner</b>	International GTA056 (or GTA713)	Do not thin more than allowed by local environmental legislation		
<b>Cleaner</b>	International GTA056 (or International GTA713)			
<b>Work Stoppages</b>	Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with International GTA056. 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 GTA056. 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 always be obtained by conventional air spray application.

For brush application, and in some colours, two coats of Interthane 990UHS may be required to give uniform coverage, especially when applying Interthane 990UHS over dark undercoats, and when using certain lead free bright colours such as yellows and oranges. Best practice is to use a colour compatible intermediate or anticorrosive coating under the Interthane 990UHS.

Condensation occurring during or immediately after application may result in a matt finish and an inferior film.

Premature exposure to ponding water will cause colour change, especially in dark colours 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 inhibit the curing mechanism of the coating.

The temperature of the surface to be coated must be 5°F (3°C) above the dew point. 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 colour and normal manufacturing tolerances.

Low molecular weight reactive additives, which will form part of the film during normal ambient cure conditions, will also affect VOC values determined using EPA Method 24.

### SYSTEMS COMPATIBILITY

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

Intergard 345	Intergard 475HS
Interplus 256	Interplus 356
Interplus 80HS	Interseal 670HS
Interzinc 52	Interzone 1000
Interzone 505	Interzone 954

Interthane 990UHS is designed to be topcoated with itself.

For alternative primers and finishes, 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](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 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
	1 US gal	0.75 US gal	1 US gal	0.25 US gal	0.25 US gal
	5 US gal	3 US gal	5 US gal	1 US gal	1 US gal

  

SHIPPING WEIGHT (TYPICAL)	Unit Size	Part A	Part B
		1 US gal	9.5 lb
5 US gal	39 lb	9.9 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.*

*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.*

Issue date: 05/02/2015

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