

## Polyurethane

### PRODUCT DESCRIPTION

A low VOC, high build, semi-gloss urethane finish with excellent gloss and colour retention on exterior exposure, for use over correctly prepared and primed surfaces.

The VOC is below 250 g/l to conform to local VOC regulations.

### INTENDED USES

Suitable for use both in new construction and as an industrial maintenance finish, Interthane 870UHS can be used in a wide variety of environments including steel infrastructure such as stadia and airports, offshore structures, petrochemical facilities, bridges, pulp and paper mills and in the power industry.

Particularly designed for use in areas where a semi-gloss finish is the preferred option.

Provides a versatile option where overcoating of intermediates in one coat is not possible using conventional thin film polyurethane finishes.

### PRACTICAL INFORMATION FOR INTERTHANE 870UHS

<b>Colour</b>	Wide range via the Chromascan system
<b>Gloss Level</b>	Semi Gloss
<b>Volume Solids</b>	68% ± 3% (depends on colour)
<b>Typical Thickness</b>	75-125 microns (3-5 mils) dry equivalent to 110-184 microns (4.4-7.4 mils) wet
<b>Theoretical Coverage</b>	5.40 m <sup>2</sup> /litre at 125 microns d.f.t and stated volume solids 218 sq.ft/US gallon at 5 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

#### Drying Time

Temperature	Touch Dry	Hard Dry	Overcoating Interval with recommended topcoats	
			Minimum	Maximum
0°C (32°F)	16 hours	30 hours	30 hours	Extended <sup>1</sup>
5°C (41°F)	6 hours	20 hours	20 hours	Extended <sup>1</sup>
25°C (77°F)	1.5 hours	6 hours	6 hours	Extended <sup>1</sup>
40°C (104°F)	1 hour	4 hours	4 hours	Extended <sup>1</sup>

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

### REGULATORY DATA

<b>Flash Point (Typical)</b>	Part A 38°C (100°F); Part B 50°C (122°F); Mixed 38°C (100°F)	
<b>Product Weight</b>	1.45 kg/l (12.1 lb/gal)	
<b>VOC</b>	1.91 lb/gal (230 g/l)	EPA Method 24

See Product Characteristics section for further details

## Polyurethane

### 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.

#### Primed Surfaces

Interthane 870UHS should always be applied over a recommended anti-corrosive coating scheme. The primer surface should be dry and free from all contamination and Interthane 870UHS 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 870UHS.

### 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) Combine entire contents of Curing Agent (Part B) with Base (Part A) and mix thoroughly with power agitator.			
<b>Mix Ratio</b>	7 part(s) : 1 part(s) by volume			
<b>Working Pot Life</b>	0°C (32°F) 7 hours	5°C (41°F) 7 hours	25°C (77°F) 1.5 hours	40°C (104°F) 30 minutes
<b>Airless Spray</b>	Recommended	Tip Range 0.38-0.53 mm (15-21 thou) Total output fluid pressure at spray tip not less than 176 kg/cm <sup>2</sup> (2503 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>	Suitable	Use suitable proprietary equipment		
<b>Brush</b>	Suitable	Typically 50-75 microns (2.0-3.0 mils) can be achieved		
<b>Roller</b>	Suitable	Typically 50-75 microns (2.0-3.0 mils) can be achieved		
<b>Thinner</b>	International GTA056 (or International 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.			

## Polyurethane

### PRODUCT CHARACTERISTICS

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

Maximum film build in one coat is best attained by airless spray. When applying by methods other than airless spray, the required film build is unlikely to be achieved. Application by air spray may require a multiple cross spray pattern to attain maximum film build. Low or high temperatures may require specific application techniques to achieve maximum film build.

If application in one coat using brush and roller is desired then the undercoat shade should be chosen to match the final coat shade. Dark coloured and MIO undercoats will typically require 2 coats of Interthane 870UHS.

When applying Interthane 870UHS by brush or roller, it may be necessary to apply multiple coats to achieve the total specified system dry film thickness.

Applicators should be aware that the ability to apply Interthane 870UHS in one coat will be affected by the temperature of the substrate. At higher steel temperatures, lower film builds and thinner coats are likely to be achieved.

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.

When applying Interthane 870UHS in confined spaces ensure adequate ventilation.

When overcoating after weathering or ageing, 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 870UHS.

Do not apply at steel temperatures below 5°C (41°F).

Surface temperature must always be a minimum of 3°C (5°F) above dew point.

It is recommended that relative humidity should not exceed 85% during application and cure.

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.

Absolute measured adhesion of topcoats to aged Interthane 870UHS is less than that to fresh material, however, it is adequate for the specified end use.

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

The following primers/intermediates are recommended for Interthane 870UHS:

Intercure 200HS	Interzinc 315
Intergard 251	Interzinc 52
Intergard 475HS	Interzinc 52HS
Interplus 256	Interzone 1000
Interplus 356	Interzone 505
Interseal 670HS	Interzone 954

For other suitable primers/intermediates, consult International Protective Coatings.

Interthane 870UHS is designed to be topcoated with itself.

## Polyurethane

### 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

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

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	4.38 US gal	5 US gal	0.63 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	57.5 lb		6.4 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.*

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