

Interthane 870

Polyurethane



Product Description

A two component, high build, acrylic polyurethane finish giving excellent durability and long term recoatability.

Intended Uses

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

Particularly designed for use in areas where a high gloss is either not desired or where a semi-gloss is the preferred option.

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

Practical Information for Interthane 870

Colour	Wide range via the Chromascan system
Gloss Level	Semi gloss
Volume Solids	56% ± 3% (depends on colour)
Typical Thickness	75-125 microns (3.0-5.0 mils) dry equivalent to 134-223 microns (5.4-8.9 mils) wet
Theoretical Coverage	4.48 m ² /litre at 125 microns d.f.t and stated volume solids 180 sq.ft/US gallon at 5 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 Interthane 870 by Self	
			<i>Minimum</i>	<i>Maximum</i>
5°C (41°F)	90 minutes	30 hours	30 hours	Extended*
15°C (59°F)	75 minutes	16 hours	16 hours	Extended*
25°C (77°F)	60 minutes	5 hours	5 hours	Extended*
40°C (104°F)	45 minutes	2½ hours	2½ hours	Extended*

* See International Protective Coatings Definitions & Abbreviations

Regulatory Data

Flash Point	Base (Part A) 35°C (95°F)	C/A (Part B) 50°C (122°F)	Mixed 35°C (95°F)
Product Weight	1.38 kg/l (11.6 lb/gal)		
VOC	351 g/l (2.92 lb/gal)	UK - PG6/23(92), Appendix 3	
	3.14 lb/gal (377 g/l)	USA - EPA Method 24	

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P o l y u r e t h a n e

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 8504:1992.

Primed Surfaces

Interthane 870 should always be applied over a recommended anti-corrosive coating scheme. The primer surface should be dry and free from all contamination, and Interthane 870 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 8501-1:1988) or SSPC SP6, Abrasive Blasting, or SSPC SP11, Power Tool Cleaning) and patch primed prior to the application of Interthane 870.

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) 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.			
Mix Ratio	7 parts : 1 part by volume			
Working Pot Life	5°C (41°F) 7 hours	15°C (59°F) 3½ hours	25°C (77°F) 2 hours	40°C (104°F) 45 minutes
Airless Spray	Recommended	- Tip range 0.43-0.58 mm (17-23 thou) - Total output fluid pressure at spray tip not less than 155 kg/cm ² (2,200 p.s.i.)		
Air Spray (Pressure Pot)	Recommended	Gun Air Cap Fluid Tip	DeVilbiss MBC or JGA 704 or 765 E	
Air spray (Conventional)	Suitable	Use suitable proprietary equipment.		
Brush	Suitable	Typically 50-75 microns (2-3 mils) can be achieved		
Roller	Suitable	Typically 50-75 microns (2-3 mils) can be achieved		
Thinner	International GTA713 (or GTA056)	Do not thin more than allowed by local environmental legislation.		
Cleaner	International GTA713 (or GTA056)			
Work Stoppages	Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with International GTA713. 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 GTA713. 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 is 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 shades. Dark coloured and MIO undercoats will typically require 2 coats of Interthane 870.

When applying Interthane 870 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 870 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.

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

When applying Interthane 870 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 870.

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 870 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.

Systems Compatibility

The following primers/intermediates are recommended for Interthane 870:

Intercure 200	Interplus 256
Intercure 200 HS	Interplus 356
Intercure 420	Interplus 770
Intercure 420 HS	Interseal 670 HS
Intergard 251	Interzinc 42
Intergard 270	Interzinc 52
Intergard 401	Interzinc 52 HS
Intergard 475 HS	Interzinc 315
	Interzone 505
	Interzone 954

Interthane 870 is designed to be topcoated with itself.

For other suitable primers/intermediates, 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 sections of the International Protective Coatings data manual:

- 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	20 litre unit	Interthane 870 Base	17.5 litres in a 20 litre container
		Interthane 870 Curing Agent	2.5 litres in a 3.7 litre container
	5 gallon unit	Interthane 870 Base	4.375 gallons in a 5 gallon container
		Interthane 870 Curing Agent	0.625 gallons in a 1 gallon container
	For availability of other pack sizes contact International Protective Coatings		
Shipping Weight	U.N. Shipping No. 1263		
	20 litre unit	27 kg (59.5 lb) Base (Part A)	3.1 kg (6.8 lb) Curing Agent (Part B)
	5 gallon unit	25 kg (55.1 lb) Base (Part A)	2.9 kg (6.4 lb) Curing Agent (Part B)
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.	

Disclaimer

The information given in this sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. Any warranty, if given, or specific Terms & Conditions of Sale are contained in International's Terms & Conditions of Sale, a copy of which can be obtained on request. Whilst we endeavour to ensure that all advice we give about the product (whether in this sheet or otherwise) is correct we have no control over either the quality or 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 whatsoever or howsoever arising for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of the use of the product. The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.

It is the user's responsibility to check that this sheet is current prior to using the product. Issue date: 22/09/99

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International Protective Coatings

Worldwide Availability

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16 Connaught Place	Singapore 628570	Brisbane	16 Connaught Place	Saudi Arabia	Texas 77091	São Paulo, S.P.
London		Queensland	London			CEP: 04547-005
W2 2ZB		Australia	W2 2ZB			Brazil
England			England			
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