Interthane 990

Polyurethane

International Protective Coatings

WORLD WIDE PRODUCT RANGE

Product Description

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

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 990

Colour	Wide range via the Chromascan system
Gloss Level	High gloss
Volume Solids	57% ± 3% (depends on colour)
Typical Thickness	50-75 microns (2-3 mils) dry equivalent to 88-132 microns (3.5-5.3 mils) wet
Theoretical Coverage	11.40 m^2/litre at 50 microns d.f.t and stated volume solids 457 sq.ft/US gallon at 2 mils d.f.t and stated volume solids
Practical Coverage	Allow appropriate loss factors
Method of Application	Airless spray, Brush, Roller

Drying Time

Temperature	Touch Dry	Hard Dry	Overcoating Interval with Interthane 990 by Self *Minimum*	*Maximum*
5°C (41°F)	5 hours	24 hours	24 hours	Extended*
15°C (59°F)	2½ hours	10 hours	10 hours	Extended*
25°C (77°F)	1½ hours	6 hours	6 hours	Extended*
40°C (104°F)	1 hour	3 hours	3 hours	Extended*

* See International Protective Coatings Definitions & Abbreviations

Regulatory Data

Flash Point	Base (Part A) 34°C (93°F)	C/A (Part B) 49°C (120°F)	Mixed 35°C (95°F)
Product Weight	1.2 kg/l (10.3 lb/gal)		
VOC	390 g/l	UK - PG6/23(92), Appendix 3	
	3.30 lb/gal (395 g/l)	USA - EPA Method 24	

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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 8504:1992.

Primed Surfaces

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

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

6 parts : 1 part by volume

Working Pot Life

5°C (41°F)	15°C (59°F)	25°C (77°F)	40°C (104°F)
12 hours	4 hours	2 hours	45 minutes

Airless Spray

Recommended

- Tip range 0.33-0.45 mm (13-18 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	DeVilbiss MBC or JGA
Air Cap	704 or 765
Fluid Tip	E

Air spray (Conventional)

Suitable — Use suitable proprietary equipment.

Brush

Suitable — Typically 40-50 microns (1.5-2.0 mils) can be achieved

Roller

Suitable — Typically 40-50 microns (1.5-2.0 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

Interthane 990 is available in a range of metallic finishes - please consult the separate Interthane 990 Metallic Working Procedures document for further information.

Level of sheen and surface finish is 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 with conventional air spray application.

For brush and roller application, and in some colours, two coats of Interthane 990 may be required to give uniform coverage, especially when applying Interthane 990 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 anti-corrosive coating under the Interthane 990.

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 990.

Absolute measured adhesion of topcoats to aged Interthane 990 is less than that to fresh material, however, it is adequate for the specified end use.

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 990 in confined spaces ensure adequate ventilation.

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 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.

A modified version of Interthane 990 is available for use within the Korean marketplace in order to provide improved workability.

Systems Compatibility

The following primers/intermediates are recommended for Interthane 990:

Intercure 200	Interprime 198
Intercure 420	Interseal 670HS
Intergard 251	Interzinc 42
Intergard 269	Interzinc 52
Intergard 270	Interzinc 315
Intergard 401	Interzone 505
Intergard 475HS	Interzone 954
Interplus 256	Interzone 1000
Interplus 356	

Interthane 990 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
- Interthane 990 Metallic Finish 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 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 990 Base Interthane 990 Curing Agent	17.14 litres in a 20 litre container 2.86 litres in a 3.7 litre container
	5 gallon unit	Interthane 990 Base Interthane 990 Curing Agent	4.29 gallons in a 5 gallon container 0.71 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	23.1 kg (50.9 lb) Base (Part A) 3.5 kg (7.7 lb) Curing Agent (Part B)	
	5 gallon unit	21.6 kg (47.6 lb) Base (Part A) 3.2 kg (7.1 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: 22/01/2004

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International Protective Coatings

Worldwide Availability

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