

Polyurethane

PRODUCT DESCRIPTION

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

Interthane 990FD is a regional product, supported in North America.

INTENDED USES

Suitable for use both in new construction and as a maintenance finish where a fast dry finish is needed to increase production. 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 990FD

Color	Limited range via the Chromascan system
Gloss Level	High Gloss
Volume Solids	57% ± 3% (depends on color)
Typical Thickness	2-3 mils (50-75 microns) dry equivalent to 3.5-5.3 mils (88-132 microns) wet
Theoretical Coverage	457 sq.ft/US gallon at 2 mils d.f.t and stated volume solids 11.40 m ² /liter at 50 microns 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 with self	
			Minimum	Maximum
41°F (5°C)	2.5 hours	12 hours	12 hours	Extended ¹
59°F (15°C)	75 minutes	3 hours	3 hours	Extended ¹
77°F (25°C)	45 minutes	105 minutes	105 minutes	Extended ¹
104°F (40°C)	30 minutes	1 hour	1 hour	Extended ¹

¹ See International Protective Coatings Definitions & Abbreviations

REGULATORY DATA

Flash Point (Typical) Part A 93°F (34°C); Part B 120°F (49°C); Mixed 95°F (35°C)

Product Weight 10.3 lb/gal (1.23 kg/l)

VOC 3.29 lb/gal (395 g/l) 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 paint application, all surfaces should be assessed and treated in accordance with ISO 8504:2000.

Primed Surfaces

Interthane 990FD should always be applied over a recommended anti-corrosive coating scheme. The primer surface should be dry and free from all contamination, and Interthane 990FD 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. SSPC-SP6 or Sa2½ (ISO 8501-1:2007), Abrasive Blasting, or SSPC-SP11, Power Tool Cleaning) and patch primed prior to the application of Interthane 990FD.

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 part(s) : 1 part(s) by volume			
Working Pot Life	41°F (5°C) 5 hours	59°F (15°C) 4 hours	77°F (25°C) 2 hours	104°F (40°C) 45 minutes
Airless Spray	Recommended	Tip Range 13-18 thou (0.33-0.45 mm) Total output fluid pressure at spray tip not less than 2204 psi (155 kg/cm ²)		
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 1.6-2.0 mils (40-50 microns) can be achieved		
Roller	Suitable	Typically 1.6-2.0 mils (40-50 microns) can be achieved		
Thinner	International GTA056 (or International GTA713)	Do not thin more than allowed by local environmental legislation		
Cleaner	International GTA056 (or International GTA713)			
Work Stoppages	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			
Clean Up	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 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 by conventional air spray application.

For brush and roller application, and in some colors, two coats of Interthane 990FD may be required to give uniform coverage, especially when applying Interthane 990FD 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 the Interthane 990FD.

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 990FD.

Absolute measured adhesion of topcoats to aged Interthane 990FD 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 41°F (5°C).

When applying Interthane 990FD 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 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.

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

SYSTEMS COMPATIBILITY

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

- Intergard 345
- Intergard 475HS
- Interseal 670HS
- Interzinc 52
- Interzinc 315

Interthane 990FD is designed to be topcoated with itself.

For other suitable primer/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 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	4.29 US gal	5 US gal	0.71 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	47.6 lb		7.1 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.