

Surface Tolerant Polyurethane

PRODUCT DESCRIPTION A low VOC, two component high solids flexible aliphatic surface tolerant polyurethane primer, intermediate or finish capable of producing high build films.

INTENDED USES

Primarily as a high performance single coat industrial maintenance coating to upgrade any tightly adhering existing coating to a longer life durable system.

For use in a wide variety of aggressive environments, including those found in chemical plants, refineries, pulp and paper mills and on bridges.

Capable of providing superior gloss and colour retention particularly when compared to epoxy based finishes and will cure at temperatures down to -5°C (23°F).

May be applied to steel surfaces where it is not possible to abrasive blast.

PRACTICAL INFORMATION FOR INTERPLUS 880

Colour	Wide range via the Chromascan system
Gloss Level	Semi Gloss
Volume Solids	80% ± 3% (depends on colour)
Typical Thickness	75-125 microns (3-5 mils) dry equivalent to 94-156 microns (3.8-6.2 mils) wet
Theoretical Coverage	8 m ² /litre at 100 microns d.f.t and stated volume solids 321 sq.ft/US gallon at 4 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 with recommended topcoats	
			Minimum	Maximum
5°C (41°F)	3 hours	8 hours	8 hours	Extended ¹
15°C (59°F)	90 minutes	3 hours	3 hours	Extended ¹
25°C (77°F)	60 minutes	2 hours	2 hours	Extended ¹
40°C (104°F)	30 minutes	45 minutes	45 minutes	Extended ¹

¹ See International Protective Coatings Definitions and Abbreviations

REGULATORY DATA

Flash Point (Typical)	Part A 32°C (90°F); Part B 51°C (124°F); Mixed 36°C (97°F)	
Product Weight	1.70 kg/l (14.2 lb/gal)	
VOC	1.58 lb/gal (190 g/l) 115 g/kg	EPA Method 24 EU Solvent Emissions Directive (Council Directive 1999/13/EC)

See Product Characteristics section for further details

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SURFACE PREPARATION

The performance of this product will depend upon the degree of surface preparation. The surface to be coated must be clean and free from contamination. Prior to paint application all surfaces should be assessed and treated in accordance with ISO 8504:2000.

Accumulated dirt and soluble salts must be removed. Dry bristle brushing will normally be adequate for accumulated dirt. Soluble salts should be removed by fresh water washing.

Abrasive Blast Cleaning

Abrasive blast clean to Sa2½ (ISO 8501-1:2007) or SSPC-SP6. If oxidation has occurred between blasting and application of Interplus 880, the surface should be reblasted to the specified visual standard.

Surface defects revealed by the blast cleaning process should be ground, filled, or treated in the appropriate manner.

Power Tool Preparation

Power tool clean to a minimum St3 (ISO 8501-1:2007) or SSPC-SP3.

Note, all scale must be removed and areas which cannot be prepared adequately by chipping or needle gun should be spot blasted to a minimum standard of Sa2 (ISO 8501-1:2007) or SSPC-SP6. Typically this would apply to C or D grade rusting in this standard.

Aged Coatings

Interplus 880 is suitable for overcoating aged coatings which show good adhesion. Loose or flaking coatings should be removed back to a firm edge. Existing epoxy or polyurethane systems which are glossy may require abrasion to ensure good intercoat adhesion.

See Product Characteristics section for further details

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	4 part(s) : 1 part(s) by volume		
Working Pot Life	5°C (41°F)	15°C (59°F)	25°C (77°F) 40°C (104°F)
	3 hours	2 hours	1 hour 30 minutes
Airless Spray	Recommended	Tip Range 0.45-0.58 mm (18-23 thou) Total output fluid pressure at spray tip not less than 141 kg/cm ² (2005 p.s.i.)	
Air Spray (Pressure Pot)	Recommended	Gun	DeVilbiss MBC or JGA
		Air Cap	704 or 765
		Fluid Tip	E
Brush	Suitable	Typically 50-75 microns (2.0-3.0 mils) can be achieved	
Roller	Suitable	Typically 50-75 microns (2.0-3.0 mils) can be achieved	
Thinner	International GTA007		
Cleaner	International GTA007		
Work Stoppages	Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with International GTA007. 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 GTA007. 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

In order to ensure good anti-corrosive performance, it is important to achieve a minimum system dry film thickness of 200 microns (8 mils) by application of multi-coats over hand prepared steel. On hand prepared rusty steel and in severe environments, patch prime with Interplus 256 or Interplus 356.

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.

When applying Interplus 880 by brush or roller, it may be necessary to apply multiple coats to achieve the total specified system dry film thickness.

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

For brush and roller application, and in some colours, two coats of Interplus 880 may be required to give uniform coverage.

Do not apply under low temperature conditions where condensation is probable, this will cause gloss loss and may detract from long term performance. Maximum RH recommended for application is 85%.

Over-application may result in foaming and microblistering.

Interplus 880 is formulated for maximum compatibility with aged coatings and as such it does not have the properties normally associated with aliphatic polyurethane finishes. It is more flexible and does not exhibit the hardness of conventional coatings, making the product eminently suitable for maintenance painting. It is not recommended for factory application.

Interplus 880 must be fully cured before exposing to ponding water otherwise adhesion loss can occur.

Interplus 880 is not designed for continuous water immersion.

Ensure adequate ventilation is present during application of Interplus 880 and topcoating systems, this may necessitate the use of forced ventilation when objects are encapsulated such as storage tanks and bridges.

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.

Curing will occur at low temperatures.

Temperature	Touch Dry	Hard Dry	Overcoating Interval with recommended topcoats	
			Minimum	Maximum
-5°C (23°F)	16 hours	24 hours	24 hours	Extended ¹
0°C (32°F)	9 hours	16 hours	16 hours	Extended ¹

¹ See International Protective Coatings Definitions and Abbreviations

SYSTEMS COMPATIBILITY

Interplus 880 is suitable for overcoating all sound aged coatings but is not generally recommended for direct application to zinc silicate (e.g. Interzinc 22) or zinc epoxy (e.g. Interzinc 52).

The following primers are recommended for Interplus 880:

Intercure 200	Interplus 256
Intercure 420	Interplus 356
Intergard 251	Interplus 770
Intergard 269	Interplus 880
Intergard 475HS	Interseal 670HS

The following topcoats are recommended for Interplus 880:

Interplus 880
Interthane 990

It should be noted that Interplus 880 is not suitable for overcoating with thin films of alkyd, chlorinated rubber, vinyl or acrylic finishes.

For other suitable primers/topcoats 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.

PACK SIZE	Unit Size	Part A		Part B	
		Vol	Pack	Vol	Pack
	20 litre	16 litre	20 litre	4 litre	5 litre
	5 US gal	4 US gal	5 US gal	1 US gal	5 US gal
For availability of other pack sizes, contact International Protective Coatings.					
SHIPPING WEIGHT (TYPICAL)	Unit Size	Part A		Part B	
	20 litre	31.1 kg		5 kg	
	5 US gal	66.1 lb		10.3 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 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.

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