

Ultra High Build Epoxy

PRODUCT DESCRIPTION

An ultra high build, high volume solids, two component catalysed epoxy, capable of being applied up to 3000 microns (120 mils) dry film thickness, and providing excellent impact resistance, abrasion resistance and adhesion properties.

Suitable for Application using standard airless spray equipment, economical to apply.

Excellent resistance to alkalis, chemicals and petroleum products.

INTENDED USES

As a coating for the protection of steelwork in severe environments where high abrasion and corrosion resistance are required including splashzone areas on offshore oil and gas platforms, wharf piles, ship loading facilities, jetties, decks, bridges, chemical plants, pulp and paper mills, and water treatment plants.

Particularly suitable when used in conjunction with appropriate aggregate to provide a tough, durable non-slip deck system. Interzone 485 is ideally suited for use on heliports, work areas and walkways on offshore structures.

Excellent resistance to cathodic disbondment, gives good compatibility with both sacrificial anode and impressed current systems. Interzone 485 is particularly suitable for the long term protection of sub-sea structures, or as a shop or field applied coating for hot, cathodically protected oil or gas pipelines.

As a tank lining for abrasive slurry e.g. CIL/CIP tanks in the gold mining industry.

PRACTICAL INFORMATION FOR INTERZONE 485

Colour	Limited range
Gloss Level	Semi Gloss
Volume Solids	99%
Typical Thickness	1000-3000 microns (40-120 mils) dry equivalent to 1010-3030 microns (40.4-121.2 mils) wet
Theoretical Coverage	0.99 m ² /litre at 1000 microns d.f.t and stated volume solids 40 sq.ft/US gallon at 40 mils d.f.t and stated volume solids
Practical Coverage	Allow appropriate loss factors
Method of Application	Airless Spray
Drying Time	

Temperature	Touch Dry	Hard Dry	Overcoating Interval with recommended topcoats	
			Minimum	Maximum
10°C (50°F)	14 hours	72 hours	72 hours	4 days ¹
15°C (59°F)	8 hours	36 hours	36 hours	3 days ¹
25°C (77°F)	4 hours	24 hours	24 hours	3 days ¹
40°C (104°F)	2 hours	12 hours	12 hours	1 day ¹

¹ Overcoating intervals are longer when overcoating Interzone 485 with self. Please contact International Protective Coatings for further details

REGULATORY DATA

Flash Point (Typical)	Part A 32°C (90°F); Part B 65°C (149°F); Mixed 63°C (145°F)		
Product Weight	1.1 kg/l (9.2 lb/gal)		
VOC	0.25 lb/gal (30 g/lt)	EPA Method 24	
	38 g/kg	EU Solvent Emissions Directive (Council Directive 2010/75/EU)	
	46 g/lt	Chinese National Standard GB23985	

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.

For immersion service, Interzone 485 must be applied to surfaces blast cleaned to Sa2½ (ISO 8501-1:2007) or SSPC-SP10. However, for atmospheric exposure Interzone 485 may be applied to surfaces prepared to a minimum of Sa2½ (ISO 8501-1:2007) or SSPC-SP6.

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

Surface profile must be a minimum of 50 microns (2 mils).

Interzone 485 can be applied over Interline 982. The primer surface should be dry and free from all contamination and Interzone 485 must be applied within the overcoating intervals specified (consult the relevant product datasheet).

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	10°C (50°F) 1 hour	15°C (59°F) 1 hour	25°C (77°F) 45 minutes	40°C (104°F) 30 minutes
Airless Spray	Recommended	Tip size 0.76 mm (30 thou) Total output fluid pressure at spray tip not less than 282 kg/cm ² (4010 p.s.i.)		
Air Spray (Pressure Pot)	Not suitable			
Brush	Suitable	For areas less than 0.1m ² brush application is possible. Multiple coats and thinning up to 3% maybe required.		
Roller	Not suitable			
Thinner	International GTA203 (Thin up to 3%)	Do not thin more than allowed by local environmental legislation		
Cleaner	International GTA853 or International GTA203			
Work Stoppages	Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with International GTA853 (or GTA203). 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 GTA853 (or GTA203). 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

Interzone 485 is suitable for use with cathodic protection with or without the recommended primer. Interzone 485 is suitable for steelwork exposed under buried conditions (Im3 according to ISO 12944-2)

For specific chemical resistance contact International Protective Coatings.

This product will not cure adequately below 5°C (41°F). For maximum performance ambient curing temperatures should be above 10°C (50°F).

In high impact and abrasion applications do not use primer and apply over a minimum surface profile height of 75 microns (3 mils).

At high film thickness, >2000 microns (80 mils) apply in two coats to minimise rough surface texture and indentations.

Care should be taken to avoid over application of any priming system used under Interzone 485. Excessive primer film thickness could lead to splitting of the film when overcoated with Interzone 485.

At temperatures below 20°C (68°F) larger pumps and tip sizes may be required to achieve atomisation. Care must be taken not to over atomise the product as this will result in a rough surface texture and indentations.

Optimum application conditions are as follows;

Apply using a minimum airless spray pump of 45:1 ratio, for best results a 64:1 ratio is preferred.

Storage must be between 20-30°C (68-86°F) to ensure suitable application viscosity.

Remove all line filters.

Thoroughly blend both components together as specified and thin up to 3% with International thinner GTA203.

Do not use excessive air pressure. Adjust fluid pressure and tip size to achieve suitable atomisation.

Fluid line should have a diameter no less than ½ inch (13 mm) with a 3/8 inch (9 mm) diameter whip end no longer than 5 metres (16.4 ft).

Interzone 485 can be utilised as a non-skid deck system by modification with suitable aggregate. Consult International Protective Coatings for further details.

Note: VOC values quoted are based on maximum possible for the product taking into account variations due to colour differences and normal manufacturing tolerances.

SYSTEMS COMPATIBILITY

The following primers are recommended for Interzone 485:

Interline 982

For other suitable primers, consult International Protective Coatings.

The following topcoats are recommended for Interzone 485:

Interfine 629HS
Intergard 740
Interthane 870
Interthane 990
Interthane 990HS
Interzone 485

For other suitable 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 Safety Data Sheet and the container(s), and should not be used without reference to the Safety Data Sheet (SDS).

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 AkzoNobel for further advice.

PACK SIZE	Unit Size	Part A		Part B	
		Vol	Pack	Vol	Pack
	20 litre	16 litre	20 litre	4 litre	4 litre
	5 US gal	3 US gal	5 US gal	0.75 US gal	1 US gal

For availability of other pack sizes, contact AkzoNobel.

SHIPPING WEIGHT (TYPICAL)	Unit Size	Part A	Part B
		20 litre	19.5 kg
5 US gal	31.5 lb	9 lb	

STORAGE	Shelf Life
	24 months minimum at 25°C. 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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