

Epoxy

PRODUCT DESCRIPTION

A two component, abrasion resistant pure epoxy coating pigmented with aluminium to give excellent long term anti-corrosive protection.

Formulated on proprietary polymer technology, enabling rapid cure and overcoating even under low temperature conditions.

INTENDED USES

As an abrasion resistant coating that can reduce corrosion due to mechanical damage and provide barrier protection in aggressive environments.

Ideally suited for use as a universal primer on offshore platforms and floating production and storage facilities on areas such as underwater hull, topsides, external superstructure, decks, cargo tanks and ballast tanks.

Can be applied directly to mechanically prepared shop primer or suitably prepared bare steel.

PRACTICAL INFORMATION FOR INTERSHIELD 300

Colour	Bronze, Aluminium
Gloss Level	Not applicable
Volume Solids	60% ± 2%
Typical Thickness	100-200 microns (4-8 mils) dry equivalent to 167-333 microns (6.7-13.3 mils) wet
Theoretical Coverage	4 m ² /litre at 150 microns d.f.t and stated volume solids 160 sq.ft/US gallon at 6 mils d.f.t and stated volume solids
Practical Coverage	Allow appropriate loss factors
Method of Application	Airless Spray, Brush, Roller
Drying Time	

Overcoating interval with self

Temperature	Touch Dry	Hard Dry	Minimum	Maximum
-5°C (23°F)	7 hours	10 hours	14 hours ¹	14 days ²
5°C (41°F)	5 hours	8 hours	9 hours ¹	14 days ²
15°C (59°F)	4 hours	7 hours	8 hours ¹	14 days ²
25°C (77°F)	3 hours	6 hours	7 hours ¹	14 days ²
40°C (104°F)	1.5 hours	2.5 hours	3 hours ¹	10 days ²

¹ Values also apply where Intershield 300 is to be overcoated using Intergard 263 or 269 for immersion service.

² Values refer to immersion service; for atmospheric service, see Product Characteristics section.

See Page 3 for information on overcoating using Intersleek 737.

REGULATORY DATA

Flash Point (Typical)	Part A 28°C (82°F); Part B 26°C (79°F); Mixed 28°C (82°F)		
Product Weight	1.23 kg/l (10.3 lb/gal)		
VOC	3.22 lb/gal (386 g/l)	EPA Method 24	
	318 g/kg	EU Solvent Emissions Directive (Council Directive 2010/75/EU)	
	329 g/l	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. Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

Abrasive Blast Cleaning

For immersion service, Intershield 300 must be applied to surfaces blast cleaned to Sa2½ (ISO 8501-1:2007) or SSPC-SP10. However, for atmospheric exposure Intershield 300 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.

A surface profile of 50-75 microns (2-3 mils) is recommended.

Ultra High Pressure Hydroblasting / Abrasive Wet Blasting

May be applied to surfaces prepared to Sa2 (ISO 8501-1:2007) or SSPC SP6 which have flash rusted to no worse than Grade HB2M (refer to International Hydroblasting Standards) or Grade SB2M (refer to International Slurry Blasting Standards).

Shop Primed Steel

Areas of breakdown, damage, weld seams etc., should be prepared to the specified standard (e.g. Sa2½ (ISO 8501-1:2007) or SSPC-SP10 or power tool cleaned to Pt3 (JSRA SPSS:1984) or SSPC-SP11). Intact, approved shop primers must be clean, dry and free from soluble salts and any other surface contaminants. Unapproved shop primers will require complete removal by blast cleaning to Sa2½ (ISO 8501-1:2007) or SSPC-SP10. In some cases sweep blasting to a defined International Paint standard (eg AS2 or AS3) may be acceptable.

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	2.5 part(s) : 1.0 part(s) by volume				
Working Pot Life	-5°C (23°F) 6 hours	5°C (41°F) 6 hours	15°C (59°F) 4 hours	25°C (77°F) 2.5 hours	40°C (104°F) 45 minutes
Airless Spray	Recommended	Tip Range 0.48-0.68 mm (19-27 thou) Total output fluid pressure at spray tip not less than 211 kg/cm ² (3000 p.s.i.)			
Air Spray (Pressure Pot)	Not recommended				
Brush	Suitable - small areas only	Typically 50-75 microns (2.0-3.0 mils) can be achieved			
Roller	Suitable - small areas only	Typically 50-75 microns (2.0-3.0 mils) can be achieved			
Thinner	International GTA220	Thinning is not normally required. Consult the local representative for advice during application in extreme conditions. Do not thin more than allowed by local environmental legislation.			
Cleaner	International GTA822 (or International GTA220)				
Work Stoppages	Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with International GTA220. 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 GTA822. 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

Apply by airless spray only. Application by other methods, e.g. brush, roller, may require more than one coat and should only be used for small areas or touch-up work.

This product must only be thinned using recommended International thinners. The use of alternative thinners, particularly those containing ketones, can severely inhibit the curing mechanism of the coating.

Surface temperature must always be a minimum of 3°C (5°F) above dew point. When applying Intershield 300 in confined spaces ensure adequate ventilation.

In common with all epoxies Intershield 300 will chalk and discolour on exterior exposure. However, these phenomena are not detrimental to anti-corrosive performance. Where a durable cosmetic finish with good gloss and colour retention is required overcoat with recommended topcoats. Over-application of Intershield 300 will extend both the minimum overcoating periods and handling times, and may be detrimental to long term overcoating properties.

Intershield 300 should be high pressure water washed and/or solvent washed prior to overcoating, where necessary, to ensure removal of any surface contamination that has accumulated.

Intershield 300 may be applied at substrate temperatures between -5°C and -20°C in certain locations worldwide. However, consideration should be given when overcoating at low temperatures as the remainder of the system may require higher temperatures to achieve full cure.

Overcoating Intervals with Recommended Topcoats (Atmospheric Service Conditions)

Recommended Topcoat	-5°C (23°F)		5°C (41°F)		25°C (77°F)		40°C (104°F)	
	Min	Max	Min	Max	Min	Max	Min	Max
Interfine 979	NA	NA	8 hours	7 days	6 hours	7 days	2 hours	6 days
Intergard 263	14 hours	14 days	9 hours	14 days	7 hours	14 days	3 hours	14 days
Intergard 269	14 hours	6 months	9 hours	6 months	7 hours	6 months	3 hours	10 weeks
Intergard 740	14 hours	14 days	9 hours	14 days	7 hours	14 days	3 hours	14 days
Intershield 300	14 hours	6 months	9 hours	6 months	7 hours	6 months	4 hours	3 months
Interthane 990	14 hours	5 days	9 hours	5 days	7 hours	3 days	4 hours	36 hours

When Intershield 300 is to be overcoated with **Intersleek 737**, the following values must be observed:

Overcoating Intervals

-5°C (23°F)		5°C (41°F)		25°C (77°F)		40°C (104°F)	
Min	Max	Min	Max	Min	Max	Min	Max
NA	NA	7 hours	24 hours	5 hours	2 days	3 hours	2 days

Maximum Pot Life

0°C (32°F)	15°C (59°F)	25°C (77°F)	35°C (95°F)
160 minutes	105 minutes	75 minutes	45 minutes

This product has the following specification approvals:

- B1 Classification of Ballast Tank Coatings (DNV/Marintek tested)
- Ballast Tank type approval (Germanischer Lloyd)
- Recognised Corrosion Control Coating (Lloyd's Register)
- Norsok M-501 System 3B

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.

SYSTEMS COMPATIBILITY

Intershield 300 will normally be applied to correctly prepared steel substrates. However, it can be used over suitable primed surfaces. Suitable primers are:

Intergard 269	Interplate 977	Interplate 855
Interplate 997	Interplate 937	Intershield 300

Suitable topcoats are:

Interfine 1080	Intergard 740	Interfine 979
Intershield 300	Intergard 263	Intersleek 717
Intergard 269	Intersleek 737	

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 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 International Protective Coatings for further advice.

PACK SIZE	Unit Size	Part A		Part B	
		Vol	Pack	Vol	Pack
	17.5 litre	12.5 litre	20 litre	5 litre	5 litre
	5 US gal	2.5 US gal	5 US gal	1 US gal	1 US gal

For availability of other pack sizes, contact International Protective Coatings.

SHIPPING WEIGHT (TYPICAL)	Unit Size	Part A	Part B
	17.5 litre	18 kg	5.2 kg
	5 US gal	32.2 lb	8.7 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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