

Epoxy

PRODUCT DESCRIPTION

A high solids, abrasion resistant, aluminium pure epoxy coating providing excellent long term anti-corrosive protection and low temperature capability.

INTENDED USES

A universal primer which can be applied directly to mechanically prepared shop primer or suitably prepared bare steel. Suitable for use with controlled cathodic protection. For use at New Construction and Maintenance.

PRACTICAL INFORMATION FOR INTERSHIELD 300HS

Colour	Bronze, Aluminium
Gloss Level	Matt
Volume Solids	78%± 2%
Typical Thickness	160 microns (6.4 mils) dry equivalent to 205 microns (8.2 mils) wet
Theoretical Coverage	4.90 m ² /litre at 160 microns d.f.t and stated volume solids 195 sq.ft/US gallon at 6.4 mils d.f.t and stated volume solids
Practical Coverage	Allow appropriate loss factors
Method of Application	Airless Spray, Roller, Brush
Drying Time	

Overcoating interval with self

Temperature	Touch Dry	Hard Dry	Minimum	Maximum
-5°C (23°F)	10 hours	28 hours	28 hours	21 days ¹
5°C (41°F)	8 hours	14 hours	14 hours	21 days ¹
25°C (77°F)	3 hours	6 hours	7 hours	14 days ¹
35°C (95°F)	2 hours	3 hours	3 hours	14 days ¹

¹ Values given refer to situations where immersion is likely to occur; for atmospheric service, see Product Characteristics section.

REGULATORY DATA

Flash Point (Typical)	Part A 42°C (108°F); Part B 40°C (104°F); Mixed 41°C (106°F)		
Product Weight	1.29 kg/l (10.8 lb/gal)		
VOC	1.71 lb/gal (206 g/l)	EPA Method 24	
	152 g/kg	EU Solvent Emissions Directive (Council Directive 1999/13/EC)	

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 300HS must be applied to surfaces blast cleaned to Sa2½ (ISO 8501-1:2007) or SSPC-SP10. However, for atmospheric exposure Intershield 300HS 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 Sa2½ (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 seam etc. should be prepared to the specified standards (e.g. Sa2½ (ISO8501-1: 2007) or SSPC-SP10 or power tool cleaned to Pt3 (JRSA 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	2.50 part(s) : 1.00 part(s) by volume			
Working Pot Life	-5°C (23°F)	5°C (41°F)	25°C (77°F)	35°C (95°F)
	120 minutes	100 minutes	60 minutes	50 minutes
Airless Spray	Recommended	Tip Range 0.53-0.78 mm (21-31 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	Recommended			
Roller	Recommended			
Thinner	International GTA220	DO NOT thin more than allowed by local environmental legislation.		
Cleaner	International GTA822 / GTA220			
Work Stoppages	Do not allow material to remain in hoses, gun or spray equipment. Release pressure from the material hose and flush fluid line and spray gun with International GTA220. Do not re-pressurise equipment until ready to resume spraying operations, and ensure pot life limitations are adhered to.			
Clean Up	Clean all equipment immediately after use with International GTA220/GTA822. Spray equipment requires flushing with this solvent. It is good working practice to periodically flush out spray equipment during the course of the working day. Frequency will depend upon factors such as amount sprayed, temperature and elapsed time including work stoppages. Monitor material condition. Do not exceed pot life limitations. 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 300HS in confined spaces ensure adequate ventilation. In common with all epoxies Intershield 300HS 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 300HS will extend both the minimum overcoating periods and handling times, and may be detrimental to long term overcoating properties.

Intershield 300HS 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 300HS 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 self (Atmospheric Service Conditions)

Substrate Temperature

-5°C(23°F)		5°C(41°F)		25°C (77°F)		40°C (104°F)	
Min	Max	Min	Max	Min	Max	Min	Max
28 hrs	3 mths	14 hrs	3 mths	7 hrs	3 mths	3 hrs	3 mths

Overcoating Interval with Recommended Topcoats

Substrate Temperature

Overcoated by	-5°C (23°F)		5°C (41°F)		25°C (77°F)		40°C (104°F)	
	Min	Max	Min	Max	Min	Max	Min	Max
Intergard 263	28 hrs	14 days	14 hrs	14 days	7 hrs	14 days	3 hrs	14 days
Intergard 269	28 hrs	6 mths	14 hrs	6 mths	7 hrs	6 mths	3 hrs	6 mths
Intergard 740	28 hrs	21 days	14 hrs	21 days	7 hrs	21 days	3 hrs	14 days
Interthane 990	28 hrs	5 days	14 hrs	5 days	7 hrs	5 days	3 hrs	3 days
Interthane 989	28 hrs	5 days	14 hrs	5 days	7 hrs	5 days	3 hrs	3 days
Interfine 691	28 hrs	5 days	14 hrs	3 days	7 hrs	3 days	3 hrs	3 days

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 300HS will normally be applied to correctly prepared steel substrates.

Suitable topcoats are:

- Interfine 691
- Intergard 263
- Intergard 269
- Intergard 740
- Interthane 989
- Interthane 990

For advice on overcoating using Intersleek systems, please contact 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
	18 litre	10.71 litre	18 litre	4.29 litre	4.5 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	
	18 litre	16.51 kg		4.53 kg	
	5 US gal	36.2 lb		8.9 lb	
STORAGE	Shelf Life	12 months at 25°C (77°F). Subject to re-inspection thereafter. Store in dry, shaded conditions away from sources of heat and ignition. Proceed with caution if storage temperature has exceeded 35°C (95°F) as gassing and pressure build-up of the Part B may occur.			

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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