Intershield® 300HS

International

Epoxy

PRODUCT DESCRIPTION

A two component, abrasion resistant coating pigmented with aluminium to give excellent long term anti-corrosive protection. Intershield 300HS is based on proven pure epoxy technology and is suitable for the most aggressive on- and offshore environments, including splash zone. Rapid and low temperature cure makes Intershield 300HS a versatile coating for application year round in new construction and maintenance.

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 and cargo tanks. Intershield 300HS can be applied directly to mechanically prepared shop primer or suitably prepared bare steel.

Suitable as a highly durable primer for fire protection coatings.

PRACTICAL INFORMATION FOR INTERSHIELD 300HS

Colour	Bronze (ENA370), Aluminium (ENA371)
Gloss Level	Not applicable
Volume Solids	78% ± 2%
Typical Thickness	100-200 microns (4-8 mils) dry equivalent to 128-256 microns (5.1-10.2 mils) wet
Theoretical Coverage	6.24 m²/litre at 125 microns d.f.t and stated volume solids 250 sq.ft/US gallon at 5 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	24 hours	24 hours	21 days[1]
5°C (41°F)	6 hours	14 hours	14 hours	21 days[1]
15°C (59°F)	3.5 hours	8 hours	8 hours	14 days[1]
25°C (77°F)	2 hours	4 hours	4 hours	14 days[1]
35°C (95°F)	60 minutes	2 hours	2 hours	14 days[1]

[1] Refers to end use in immersion service. For non-immersed service, maximum overcoating interval is 'Extended'; see AkzoNobel Definitions and Abbreviations.

REGULATORY DATA

Flash Point (Typical)	Part A 49°C (120°F); Part B 31°C (88°F); Mixed 41°C (106°F)	
Product Weight	1.285 kg/l (10.7 lb/gal)	
VOC	1.46 lb/gal (176 g/lt)	EPA Method 24
	154 g/kg	EU Solvent Emissions Directive (Council Directive 2010/75/EU)
	179 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.

Abrasive Blast Cleaning
Abrasive blast clean to Sa2½ (ISO 8501-1:2007) or SSPC-SP10. If oxidation has occurred between blasting and application of Intershield 300HS, 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.

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 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.

Stainless Steel
Intershield 300HS may be applied to stainless steel substrates. Surface should be cleaned, degreased and abrasive blast cleaned with a non-metallic abrasive, ensuring a 35-50µm surface profile is achieved.

Galvanized Steel
Galvanised substrates should be thoroughly cleaned and degreased, prior to sweep blast cleaning to a standard similar to Sa1 (ISO8501-1:2007) or SSPC-SP16.

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)	15°C (59°F)	25°C (77°F)	35°C (95°F)
4 hours	2.5 hours	100 minutes	75 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/cm² (3000 p.s.i.)
Brush	Suitable	Recommended for small areas and repairs, multiple coats will be necessary to achieve the required dry film thickness.
Roller	Suitable	Can be used for the touch-up of small areas or for stripe coating of welds and edges.

Thinner
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.

Cleaner
International GTA220

Clean Up
Clean all equipment immediately after use with International GTA220. 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.

PRODUCT CHARACTERISTICS

Apply by airless spray. 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.

Intershield 300HS may be applied at substrate temperatures down to -10°C. Before applications are made below -5°C consult your local representative for further details of application procedure. Consideration should be given to the remainder of the scheme, which may require higher temperatures for optimum application and/or cure. 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. 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.

Overcoating Interval with Recommended Topcoats

	Substrate Temperature							
Overcoated by	-5°C (23°F)		5°C (41°F)		25°C (77°F)		35°C (95°F)	
	Min	*Max*	*Min*	*Max*	*Min*	*Max*	*Min*	*Max*
Intergard 269	24 hrs	6 mths	14 hrs	6 mths	4 hrs	6 mths	2 hrs	6 mths
Intergard 740	24 hrs	28 days	14 hrs	28 days	4 hrs	28 days	2 hrs	14 days
Interthane 990	24 hrs	28 days	14 hrs	28 days	4 hrs	7 days	2 hrs	4 days
Interthane 990E	*	*	14 hrs	28 days	4 hrs	7 days	2 hrs	4 days

** not applicable*

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 is normally applied directly to blast cleaned steel; however, it can be applied over the following primers when required:

Interzinc 22 Interzinc 52 Interzinc 52E

Recommended intermediates / topcoats are:

Intergard 269 Intergard 740 Interthane 990 Interthane 990E

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
	17.5 litre	12.5 litre	20 litre	5 litre	5 litre
	For availability of other pack sizes, contact AkzoNobel.				

SHIPPING WEIGHT (TYPICAL)	Unit Size	
	17.5 litre	229 kg

STORAGE	Shelf Life	18 months minimum at 25°C (77°F). 12 months at 35°C (95°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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