

Interseal 670HS

Surface Tolerant Epoxy

WORLD WIDE PRODUCT RANGE

PRODUCT DESCRIPTION

A low VOC, two component high build, high solids surface tolerant epoxy maintenance coating.

Available in an aluminium pigmented version to provide additional anti-corrosive barrier protection.

INTENDED USES

For application to a wide variety of substrates including hand prepared rusty steel, abrasive blast cleaned and hydroblasted steel, and a wide range of intact, aged coatings.

Provides excellent anti-corrosive protection in industrial, coastal structures, pulp and paper plants, bridges and offshore environments in both atmospheric exposure and immersion service.



Certified to
ANSI/NSF Standard
61. NSF Certification
is for tanks greater
than 100 gallons
(378½ litres).

PRACTICAL INFORMATION FOR INTERSEAL 670HS

Colour	Range							
Gloss Level	Semi-gloss (Aluminium is eggshell)							
Volume Solids	82% ± 3% (depends on colour)							
Typical Thickness	100-200 microns (4-8 mils) dry equivalent to 122-244 microns (4.9-9.8 mils) wet							
Theoretical Coverage	6.56 m²/litre at 125 microns d.f.t and stated volume solids 263 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, Air spray, Brush, Roller							
Drying Time ▲								
				Overcoating Interval Interseal 670HS with Self			Overcoating Interval with recommended topcoats	
Temperature	Touch Dry	Hard Dry	Min	Max●	Max†	Min	Max●	Max†#
10°C (50°F)	8 hours	32 hours	32 hours	6 weeks	Extended*	20 hours	21 days	12 weeks
15°C (59°F)	7 hours	26 hours	26 hours	4 weeks	Extended*	14 hours	14 days	8 weeks
25°C (77°F)	5 hours	18 hours	18 hours	14 days	Extended*	10 hours	7 days	4 weeks
40°C (104°F)	2 hours	6 hours	6 hours	7 days	Extended*	4 hours	3 days	2 weeks

▲ For curing at low temperatures, an alternative curing agent is available. See Product Characteristics for details.

● Refers to situations where immersion is likely to occur.

† Refer to atmospheric service only.

* See International Protective Coatings Definitions & Abbreviations.

Maximum overcoating intervals are shorter when using polysiloxane topcoats. Consult International Protective Coatings for further details.

REGULATORY DATA

Flash Point	Base (Part A) 36°C (97°F)	C/A (Part B) 56°C (133°F)	Mixed 33°C (91°F)
Product Weight	1.6 kg/l (13.3 lb/gal)		
VOC	175 g/l	UK - PG6/23(92), Appendix 3	
	2.00 lb/gal (240 g/l)	USA - EPA Method 24	



Ecotech is an initiative by International Protective Coatings a world leader in coating technology to promote the use of environmentally sensitive products across the globe.

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SURFACE PREPARATION

The performance of this product will depend upon the degree of surface preparation. The surface 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 8504:1992.

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

For immersion service, Interseal 670HS must be applied to surfaces blast cleaned to Sa2½ (ISO 8501-1:1988) or SSPC-SP10. However, for atmospheric exposure best performance will be achieved when Interseal 670HS is applied to surfaces prepared to a minimum of Sa2½ (ISO 8501-1:1988) 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.

Hand or Power Tool Preparation

Hand or power tool clean to a minimum St2 (ISO 8501-1:1988) or SSPC-SP2.

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 8501-1:1988) or SSPC-SP6. Typically this would apply to C or D grade rusting in this standard.

Ultra High Pressure Hydroblasting/Abrasive Wet Blasting

May be applied to surfaces prepared to Sa2½ (ISO 8501-1:1988) or SSPC-SP6 which have flash rusted to no worse than Grade HB2½M (refer to International Hydroblasting Standards) or Grade SB2½M (refer to International Slurry blasting Standards). It is also possible to apply to damp surfaces in some circumstances. Further information is available from International Protective Coatings.

Aged Coatings

Interseal 670HS is suitable for overcoating a limited range of intact, tightly adherent aged coatings. Loose or flaking coatings should be removed back to a firm edge. Glossy finishes may require light abrasion to provide a physical 'key'. See Product Characteristics section for further information.

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	5.67 parts : 1.00 part by volume			
Working Pot Life	10°C (50°F) 5 hours	15°C (59°F) 3 hours	25°C (77°F) 2 hours	40°C (104°F) 1 hour
Airless Spray	Recommended	- Tip range 0.45-0.58 mm (18-23 thou) - Total output fluid pressure at spray tip not less than 176 kg/cm ² (2,500 p.s.i.)		
Air Spray (Pressure Pot)	Recommended	Gun Air Cap Fluid Tip	DeVilbiss MBC or JGA 704 or 765 E	
Brush	Recommended	Typically 100-125 microns (4-5 mils) can be achieved		
Roller	Recommended	Typically 75-100 microns (3-4 mils) can be achieved		
Thinner	International GTA220 (or GTA415)	May be necessary at low temperatures, see Product Characteristics. Do not thin more than allowed by local environmental legislation.		
Cleaner	International GTA822 (or GTA415)			
Work Stoppages	Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with International GTA822. 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

In order to achieve optimum performance on hand prepared steel, the aluminium pigmented version should be applied as a primer coat by brush to ensure thorough wetting out of the substrate by Interseal 670HS.

For water immersion service, surface preparation to a minimum of Sa2½ (ISO 8501-1:1988) or SSPC-SP10 followed by application of multi-coats of Interseal 670HS to a total minimum dry film thickness of 250 microns (10 mils) is required.

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.

If salt water is used in the wet blast process the resulting surface must be thoroughly washed with fresh water before application of Interseal 670HS. With freshly blasted surfaces a slight degree of flash rusting is allowable, and is preferable to the surface being too wet. Puddles, ponding and accumulations of water must be removed.

Interseal 670HS is suitable for overcoating intact, aged alkyd, epoxy and polyurethane systems. However, this product is not recommended where thermoplastic coatings such as chlorinated rubbers and vinyls have previously been used. Please consult International Protective Coatings for alternative recommendations.

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

Level of sheen and surface finish is dependent on application method. Avoid using a mixture of application methods whenever possible.

In common with all epoxies Interseal 670HS will chalk and discolour on exterior exposure. However, these phenomena are not detrimental to anti-corrosive performance.

Premature exposure to ponding water will cause a colour change, especially in dark colours.

Interseal 670HS can be used as a non-skid deck system by modification with addition of GMA132 (crushed flint) aggregate. Application should then be to a suitably primed surface. Typical thicknesses will be between 500-1,000 microns (20-40 mils). Preferred application is by a suitable large tip hopper gun (e.g. Sagola 429 or Air texture gun fitted with a 5-10 mm nozzle). Trowel or roller can be used for small areas. Alternatively, a broadcast method of application can be used. Consult International Protective Coatings for further details.

Interseal 670HS is certified to ANSI/NSF Standard 61 (selected colours only). Consult International Protective Coatings for further details. Certification is for tanks greater than 100 gallons (378½ litres), for pipes which are 6 inches (15 cm) in diameter or greater and for valves which are 2 inches (5 cm) in diameter or greater.

Low Temperature Curing

A winter grade curing agent is also available to enable more rapid cure at temperatures less than 10°C (50°F), however this curing agent will give an initial shade variation and more rapid discoloration on weathering.

Interseal 670HS is capable of curing at temperatures below 0°C (32°F). However, this product should not be applied at temperatures below 0°C (32°F) where there is a possibility of ice formation on the substrate.

Temperature	Touch Dry	Hard Dry	Min	Overcoating Interval Interseal 670HS with Self		Overcoating Interval with recommended topcoats		
				Min	Max•	Min	Max•	Max†
-5°C (23°F)	24 hours	72 hours	72 hours	12 weeks	Extended*	72 hours	8 weeks	12 weeks
0°C (32°F)	16 hours	56 hours	56 hours	10 weeks	Extended*	42 hours	6 weeks	10 weeks
5°C (41°F)	9 hours	36 hours	36 hours	8 weeks	Extended*	36 hours	28 days	8 weeks
10°C (50°F)	5 hours	24 hours	24 hours	6 weeks	Extended*	16 hours	21 days	6 weeks

• Refers to situations where immersion is likely to occur.

† Refer to atmospheric service only.

* See International Protective Coatings Definitions & Abbreviations.

Touch dry times shown above are actual drying times due to chemical cure, rather than physical set due to solidification of the coating film at temperatures below 0°C (32°F).

SYSTEMS COMPATIBILITY

Interseal 670HS will normally be applied to correctly prepared steel substrates. However, it can be used over suitably primed surfaces. Suitable primers are:

Intercrete 200	Interplus 356
Intergard 269	Interzinc 315
Interplus 256	

Where a cosmetically acceptable topcoat is required the following products are recommended:

Intercryl 530	Intergard 740
Interfine 629HS	Interthane 870
Interfine 878	Interthane 990
Interfine 979	

Other suitable primers/topcoats are available. 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 sections of the International Protective Coatings data manual:

- 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	20 litre unit	Interseal 670HS Base	17 litres in a 20 litre container
		Interseal 670HS Curing Agent	3 litres in a 3.7 litre container
	5 gallon unit	Interseal 670HS Base	4.25 gallons in a 5 gallon container
		Interseal 670HS Curing Agent	0.75 gallons in a 1 gallon container
	For availability of other pack sizes contact International Protective Coatings		
SHIPPING WEIGHT	U.N. Shipping No. 1263		
	20 litre unit	30.8 kg (67.9 lb) Base (Part A)	3.5 kg (7.6 lb) Curing Agent (Part B)
	5 gallon unit	29.4 kg (64.9 lb) Base (Part A)	3.08 kg (6.8 lb) Curing Agent (Part B)
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. Protect from frost.		

Disclaimer

The information given in this sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. Any warranty, if given, or specific Terms & Conditions of Sale are contained in International's Terms & Conditions of Sale, a copy of which can be obtained on request. Whilst we endeavour to ensure that all advice we give about the product (whether in this sheet or otherwise) is correct we have no control over either the quality or 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 whatsoever or howsoever arising from the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of the use of the product. The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.

It is the user's responsibility to check that this sheet is current prior to using the product. Issue date: 01/03/2005

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International Protective Coatings

Worldwide Availability

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