Interseal® 670HS

Surface Tolerant Epoxy

PRODUCT DESCRIPTION

LOW TEMPERATURE CURE EGA248 **(**EGA056 in North America**)**

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

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.

PRACTICAL INFORMATION FOR INTERSEAL 670HS

Color Available in a wide range of colors including Aluminum

Gloss Level Semi Gloss (Aluminum is eggshell)

Volume Solids 82% ± 3% (depends on color)

Typical Thickness 4-10 mils (100-250 microns) dry equivalent to 4.9-12.2 mils (122-305 microns) wet

Theoretical Coverage 263 sq.ft/US gallon at 5 mils d.f.t and stated volume solids
6.56 m²/liter at 125 microns 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 with self	
Temperature	**Touch Dry**	**Hard Dry**	*Minimum*	*Maximum*
23°F (-5°C)	24 hours	72 hours	72 hours	12 weeks[1]
32°F (0°C)	16 hours	56 hours	56 hours	10 weeks[1]
41°F (5°C)	9 hours	36 hours	36 hours	8 weeks[1]
50°F (10°C)	5 hours	24 hours	24 hours	6 weeks[1]

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

See Product Characteristics for information on topcoat intervals. Maximum overcoating intervals are shorter when using polysiloxane topcoats. Consult International Protective Coatings for further details.

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 32°F (0°C).

A temperate cure is also available; please refer to alternative datasheet for details.

REGULATORY DATA

Flash Point (Typical) Part A 97°F (36°C); Part B 133°F (56°C); Mixed 91°F (33°C)

Product Weight 13.4 lb/gal (1.6 kg/l)

VOC 2.00 lb/gal (240 g/lt) EPA Method 24

114 g/kg EU Solvent Emissions Directive (Council Directive 1999/13/EC)

151 g/lt (1.26 lb/US Gal) Chinese National Standard GB23985

See Product Characteristics section for further details

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SURFACE PREPARATION

The performance of this product will depend upon the degree of surface preparation. The surface to be coated must be clean, dry and free from contamination. Prior to paint application all surfaces should be assessed and treated in accordance with ISO 8504:2000.

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 SSPC-SP10 or Sa2½ (ISO 8501-1:2007). However, for atmospheric exposure best performance will be achieved when Interseal 670HS is applied to surfaces prepared to a minimum of SSPC-SP6 or Sa2½ (ISO 8501-1:2007). Surface defects revealed by the blast cleaning process should be ground, filled, or treated in the appropriate manner.

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

Hand or Power Tool Preparation
Hand or power tool clean to a minimum St2 (ISO 8501-1:2007) 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 8501-1:2007) 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 8501-1:2007) 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 part(s): 1 part(s) by volume

Working Pot Life

41°F (5°C)	50°F (10°C)
4 hours	3 hours

Airless Spray

Recommended

Tip Range 18-23 thou (0.45-0.58 mm)
Total output fluid pressure at spray tip not less than 2503 psi (176 kg/cm²)

Air Spray (Pressure Pot)

Recommended

Gun	DeVilbiss MBC or JGA
Air Cap	704 or 765
Fluid Tip	E

Brush

Recommended

Typically 4.0-5.0 mils (100-125 microns) can be achieved

Roller

Recommended

Typically 3.0-4.0 mils (75-100 microns) can be achieved

Thinner

International GTA220

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

For water immersion service, surface preparation to a minimum of SSPC-SP10 or Sa2½ (ISO 8501-1:2007) followed by application of multi-coats of Interseal 670HS to a total minimum dry film thickness of 10 mils (250 microns) is required.

Colors derived from chromascan bases as the first coat of a specification for immersion service is not recommended.

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. Lower 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 may be applied to suitably sealed or primed concrete; contact International Protective Coatings for further advice on specification and primers.

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 5°F (3°C) above dew point. Interseal 670HS is capable of curing at temperatures below 32°F (0°C). However, this product should not be applied at temperatures below 32°F (0°C) where there is a possibility of ice formation on the substrate.

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. The actual rate of chalking will depend upon climatic conditions and will normally be limited to a thin surface layer. Chalking is only likely to reduce anti-corrosion properties when the chalked film can be removed, for example, by exposure to high UV together with intermittent exposure to fast moving water.

Premature exposure to ponding water will cause a color change, especially in dark colors.

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 20-40 mils (500-1,000 microns). 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.

Overcoating Interval with Recommended Topcoats

			Minimum overcoating interval with recommended topcoats	
Temperature	Touch Dry	Hard Dry	*Minimum*	*Maximum*
-23°F (-5°C)	24 hours	72 hours	72 hours	12 weeks
32°F (0°C)	16 hours	56 hours	42 hours	10 weeks
41°F (5°C)	9 hours	36 hours	36 hours	8 weeks
50°F (10°C)	5 hours	24 hours	16 hours	6 weeks

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 color 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

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

Suitable primers include

Intercure 200	Intergard 269
Interplus 356	Interzinc 315
Interzinc 52E	

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

Interfine 878	Interfine 979
Intergard 740	Interthane 870
Interthane 990	Interthane 990E

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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 liter	17 liter	20 liter	3 liter	3.7 liter
5 US gal	4.25 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 liter	30.8 kg	3.5 kg
5 US gal	64.9 lb	6.8 lb

STORAGE

Shelf Life	18 months at 77°F (25°C). Subject to re-inspection thereafter. Store in dry, shaded conditions away from sources of heat and ignition.

Disclaimer

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.

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