

## Inorganic Zinc Silicate

### PRODUCT DESCRIPTION

A two pack heat resistant ceramic zinc silicate anti-corrosive primer. Suitable for controlled cathodic protection.

### INTENDED USES

A two pack ceramic zinc ethyl silicate anti-corrosive primer designed to provide:

- Good corrosion protection
- Good resistance to thermal degradation from welding / burn back in adjacent areas up to 800°C (1472°F)
- Reduced secondary surface preparation requirements

Suitable for use at new construction as a primer for the corrosion protection of steel partitions, bulkheads and internal walls which may be in contact with insulation used to reduce energy losses in accommodation areas, engine rooms etc.

### PRACTICAL INFORMATION FOR INTERPLATE 837HS

<b>Colour</b>	Grey
<b>Gloss Level</b>	Not applicable
<b>Volume Solids</b>	45% ± 3%
<b>Typical Thickness</b>	30-75 microns (1.2-3 mils) dry equivalent to 67-167 microns (2.7-6.7 mils) wet
<b>Theoretical Coverage</b>	6 m <sup>2</sup> /litre at 75 microns d.f.t and stated volume solids 241 sq.ft/US gallon at 3 mils d.f.t and stated volume solids
<b>Practical Coverage</b>	Allow appropriate loss factors
<b>Method of Application</b>	Airless Spray, Roller, Air Spray, Brush, Conventional Spray

#### Drying Time

Temperature	Touch Dry	Hard Dry	Overcoating Interval with recommended topcoats	
			Minimum	Maximum
5°C (41°F)	40 minutes	100 minutes	72 hours	Extended <sup>1</sup>
15°C (59°F)	30 minutes	80 minutes	48 hours	Extended <sup>1</sup>
25°C (77°F)	20 minutes	50 minutes	32 hours	Extended <sup>1</sup>
40°C (104°F)	10 minutes	25 minutes	16 hours	Extended <sup>1</sup>

<sup>1</sup> See International Protective Coatings Definitions and Abbreviations

The drying times quoted have been determined at the quoted temperature and 65% relative humidity. Prior to overcoating, verify a value of 3 via ASTM D4752 MEK rub test. See Product Characteristics section for more details on overcoating.

### REGULATORY DATA

<b>Flash Point (Typical)</b>	Part A 32°C (90°F); Part B 22°C (71°F); Mixed 23°C (73°F)	
<b>Product Weight</b>	1.714 kg/l (14.3 lb/gal)	
<b>VOC</b>	5.04 lb/gal (605 g/l)	EPA Method 24
	619 g/l	Calculated

See Product Characteristics section for further details

## Protective Coatings

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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

Abrasive blast clean to Sa2½ (ISO 8501-1:2007) or SSPC-SP6 (or SSPC-SP10 for optimum performance). If oxidation has occurred between blasting and application of Interplate 837HS, 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.

A surface profile of 40-75 microns (1.5-3.0 mils) is recommended.

#### Shop Primed Steelwork

Interplate 837HS is suitable for application to unweathered steelwork freshly coated with zinc silicate shop primers.

Blast to a minimum of near white metal SSPC-SP10 or Sa2½ Swedish Standard particle SIS 05 59 00 or St2 for the reverse side of welding such as insulation wall inside.

If the zinc shop primer shows extensive or widely scattered breakdown, or excessive zinc corrosion products, overall sweep blasting will be necessary. Other types of shop primer are not suitable for overcoating and will require complete removal by abrasive blast cleaning.

Weld seams and damaged areas should be blast cleaned to Sa2½ (ISO 8501-1:2007) or SSPC-SP6.

#### Damaged / Repair Areas

All damaged areas should ideally be blast cleaned to Sa2½ (ISO 8501-1:2007) or SSPC-SP6. However, it is acceptable that small areas can be power tool cleaned to Pt3 (JSRA SPSS:1984) or SSPC-SP11, provided the area is not polished. Repair of the damaged area can then be carried out using a recommended zinc epoxy primer - consult International Protective Coatings for specific advice.

### APPLICATION

<b>Mixing</b>	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 Paste (Part A) with a power agitator.			
	(2) Combine entire contents of Binder (Part B) with Paste (Part A) and mix thoroughly with a power agitator.			
<b>Mix Ratio</b>	10 part(s) : 9 part(s) by volume			
<b>Working Pot Life</b>	5°C (41°F) 18 hours	15°C (59°F) 12 hours	25°C (77°F) 8 hours	40°C (104°F) 4 hours
<b>Airless Spray</b>	Recommended	Tip Range 0.38-0.53 mm (15-21 thou) Total output fluid pressure at spray tip not less than 112 kg/cm <sup>2</sup> (1593 p.s.i.)		
<b>Air Spray (Pressure Pot)</b>	Recommended	Gun Air Cap Fluid Tip	DeVilbiss MBC or JGA 704 or 765 E	
<b>Air Spray (Conventional)</b>	Suitable	Use suitable proprietary equipment		
<b>Brush</b>	Small areas only	Typically 30-75 microns (1.2-3.0 mils) can be achieved		
<b>Roller</b>	Small areas only	Typically 30-75 microns (1.2-3.0 mils) can be achieved		
<b>Thinner</b>	International GTA415 or GTA803			
<b>Cleaner</b>	International GTA415 or GTA803			
<b>Work Stoppages</b>	Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with International GTA803. 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.			
<b>Clean Up</b>	Clean all equipment immediately after use with International GTA803. 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

Interplate 837HS has been specifically designed to provide good corrosion protection and heat resistance which makes it suitable for use on steelwork where insulation will be added to minimise heat transmission through bulkheads, dry areas, void spaces etc. This product should NOT be used under insulation which is likely to become constantly wet and/or subjected to thermal heat cycling conditions.

Prior to overcoating, Interplate 837HS must be clean, dry and free from both soluble salts and excessive zinc corrosion products.

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

When applying Interplate 837HS in confined spaces ensure adequate ventilation.

The minimum overcoating interval is dependent upon the relative humidity during cure.

If thinning is required to assist spray application in warmer climates, (typically >28°C (82°F)), it is recommended that International GTA415 thinners are used.

It is recommended that prior to overcoating a solvent rub test to ASTM D4752 should be undertaken. A value of 3 indicates a satisfactory degree of cure for overcoating purposes.

At relative humidities below 55%, curing will be retarded and humidity may need to be increased by steam or water spraying.

Excessive film thickness and/or over-application of Interplate 837HS can lead to mudcracking, which will require complete removal of the affected areas by abrasive blasting and re-application in accordance with the original specification.

Care should be exercised to avoid application in excess of 110 microns (4.3 mils) dry film thickness otherwise optimum total system performance will not be achieved.

Untopcoated Interplate 837HS is not suitable for exposure in acid or alkaline conditions or continuous water immersion.

This product has the following specification approvals:

- Fire Resistance - Surface Spread of Flame - IMO Resolution MSC 307(88): Annex 1: Part 5
- Fire Resistance - Marine Equipment Directive compliant

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

Before overcoating with recommended topcoats ensure Interplate 837HS is fully cured. If weathering has occurred all zinc salts should be removed from the surface by fresh water washing, and if necessary scrubbing with bristle brushes.

Interplate 837HS is suitable for overcoating with:

Intergard 269  
Intergard 787  
Intershield 300  
Intershield 300HS

In some cases it may be necessary to apply a mist coat of suitable viscosity to minimise bubbling. This will depend upon the age of the Interplate 837HS, surface roughness and ambient conditions during curing and application. Alternatively, an epoxy sealer coat, such as Intergard 269, can be used to reduce bubbling problems.

For other suitable primers/intermediates 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](http://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
	15 litre	7.9 litre	20 litre	7.1 litre	10 litre
For availability of other pack sizes, contact International Protective Coatings.					
SHIPPING WEIGHT (TYPICAL)	Unit Size	Part A		Part B	
		20 kg		7.6 kg	
	15 litre				
STORAGE	Shelf Life	6 months 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](http://www.international-marine.com) or [www.international-pc.com](http://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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