

## Inorganic Zinc Rich Silicate

### PRODUCT DESCRIPTION

A low VOC, inorganic zinc-rich ethyl silicate based primer providing outstanding corrosion protection for properly prepared steel surfaces. Contains 82% zinc dust in the dry film for long term corrosion protection.

### INTENDED USES

An effective galvanic primer for bridges, tanks, piping, pipe racks, offshore drilling equipment and transportation equipment.

Excellent for protecting structural steel for extended periods before field topcoating.

Suitable for industrial, marine and process environments.

Topcoat is required for more severe chemical exposures.

For use at newbuilding or maintenance and repair.

### PRACTICAL INFORMATION FOR INTERZINC 22HS

<b>Colour</b>	Reddish Grey, Grey
<b>Gloss Level</b>	Matt
<b>Volume Solids</b>	81% ± 2%
<b>Typical Thickness</b>	62-75 microns (2.5-3 mils) dry equivalent to 77-93 microns (3.1-3.7 mils) wet
<b>Theoretical Coverage</b>	13.06 m <sup>2</sup> /litre at 62 microns d.f.t and stated volume solids 524 sq.ft/US gallon at 2.5 mils d.f.t and stated volume solids
<b>Practical Coverage</b>	Allow appropriate loss factors
<b>Method of Application</b>	Airless Spray, Air Spray

#### Drying Time

Temperature	Touch Dry	Hard Dry	Overcoating Interval with recommended topcoats	
			Minimum	Maximum
10°C (50°F)	30 minutes	2 hours	48 hours	Extended <sup>1</sup>
15°C (59°F)	25 minutes	1.5 hours	36 hours	Extended <sup>1</sup>
25°C (77°F)	15 minutes	1 hour	24 hours	Extended <sup>1</sup>
40°C (104°F)	15 minutes	1 hour	24 hours	Extended <sup>1</sup>

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

Overcoating is dependent upon ambient conditions. The figures quoted above have been determined at the quoted temperature and 50% relative humidity. See Product Characteristics for further advice.

### REGULATORY DATA

<b>Flash Point (Typical)</b>	Part A 17°C (62°F); Part B Not applicable; Mixed 19°C (65°F)	
<b>Product Weight</b>	3.28 kg/l (27.4 lb/gal)	
<b>VOC</b>	2.42 lb/gal (290 g/lit)	EPA Method 24

See Product Characteristics section for further details

## Inorganic Zinc Rich Silicate

### 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-SP10 for optimum performance. SSPC-SP6 may be only used when the exposure is considered mild. If oxidation has occurred between blasting and application of Interzinc 22HS, 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 50-63 microns (2.0-2.5 mils) is recommended.

#### Shop Primed Steelwork

Interzinc 22HS is suitable for application to unweathered steelwork freshly coated with solvent based zinc silicate shop primers.

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-SP10.

### APPLICATION

<b>Mixing</b>	Interzinc 22HS is supplied in two parts, a liquid Binder base component (Part A) and a Powder component (Part B). The Powder (Part B) should be slowly added to the liquid Binder (Part A) whilst stirring with a mechanical agitator. DO NOT ADD LIQUID TO POWDER. Material should be filtered prior to application and should be constantly agitated in the pot during spraying. Once the unit has been mixed it should be used within the working pot life specified.		
<b>Mix Ratio</b>	1 part(s) : 2.86 part(s) by weight		
<b>Working Pot Life</b>	10°C (50°F) 12 hours	15°C (59°F) 10 hours	25°C (77°F) 40°C (104°F) 8 hours 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/cm² (1593 p.s.i.)	
<b>Air Spray (Pressure Pot)</b>	Recommended	Gun Air Cap Fluid Tip	DeVilbiss MBC or JGA 64 D
<b>Brush</b>	Not recommended		
<b>Roller</b>	Not recommended		
<b>Thinner</b>	International GTA138	Do not thin more than allowed by local environmental legislation. For tropical conditions use International GTA027	
<b>Cleaner</b>	International GTA138		
<b>Work Stoppages</b>	Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with International GTA138. 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 GTA138. 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.		

## Inorganic Zinc Rich Silicate

### PRODUCT CHARACTERISTICS

At relative humidities below 50%, curing will be severely retarded and humidity may need to be increased by steam or water spraying.

Excessive film thickness and/or over-application of Interzinc 22HS 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.

As is characteristic with high solids coatings, care should be taken to maintain the recommended wet film thickness in order to avoid excessive dry film thickness.

Care should be exercised to avoid application of dry film thickness in excess of 125 microns (5 mils).

The minimum overcoating interval is dependent upon the relative humidity during cure. Below 55% relative humidity the minimum recoat period will normally be at least 24 hours, but will be dependent upon the ambient temperature and relative humidity during the application and curing period.

It is recommended that prior to overcoating a solvent rub test to ASTM D4752 should be undertaken. A value of 4 indicates a satisfactory degree of cure for overcoating purposes.

For high temperature systems the thickness of Interzinc 22HS should be restricted to 50 microns (2 mils) d.f.t. Continuous dry temperature resistance of Interzinc 22HS is 400°C (752°F) if left untopcoated. If this product is used as a primer for Intertherm 50, the dry temperature resistance will also be 400°C (752°F).

Interzinc 22HS is not suitable for exposure in acid or alkaline environments.

When applying Interzinc 22HS in confined spaces ensure adequate ventilation.

This product complies with:

- SSPC Paint Specification No. 20 Type 1C

This product has the following specification approvals:

- ASTM A490 Class B Slip Coefficient

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.

### SYSTEMS COMPATIBILITY

When it is necessary for Interzinc 22HS to be overcoated with another coating, the surface of the zinc film must be clean and free of any zinc salts. A minimum of 50 microns (2 mils) d.f.t of any subsequent coat is needed to ensure good film formation. Before overcoating with recommended topcoats ensure Interzinc 22HS 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.

Recommended topcoats/intermediates are:

Intercryl 530	Intergard 269
Intercure 200	Intergard 475HS
Intercure 420	Interseal 670HS
Intergard 251	Intertherm 50

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 Interzinc 22HS, 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 topcoats/intermediates consult International Protective Coatings.

## Inorganic Zinc Rich Silicate

### 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
	5 US gal	2.42 US gal	5 US gal	1.22 US gal	5 US gal
	1 US gal	0.48 US gal	1 US gal	0.24 US gal	1 US gal
For availability of other pack sizes, contact International Protective Coatings.					
Metric Equivalent:					
	Unit Size	Part A Volume		Part B Volume	
	5 US gal	9.16 litres		4.62 litres	
	1 US gal	1.82 litres		0.91 litres	
SHIPPING WEIGHT (TYPICAL)	Unit Size	Part A		Part B	
		Weight		Weight	
	5 US gal	25.3 lb		72.5 lb	
Metric Equivalent:					
	Unit Size	Part A Weight		Part B Weight	
	5 US gal	11.48 kg		32.8 kg	
STORAGE	Shelf Life	Part A - 6 months minimum at 25°C (77°F). Part B - 12 months minimum at 25°C (77°F). Subject to re-inspection thereafter. Store in dry, shaded conditions at 4-35°C (40-95°F) 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.*

Copyright © AkzoNobel, 01/03/2016.

All trademarks mentioned in this publication are owned by, or licensed to, the AkzoNobel group of companies.

[www.international-pc.com](http://www.international-pc.com)