

# Interplate 317

Z i n c   S i l i c a t e

**Product Description** A fast drying, two component, weldable zinc ethyl silicate pre-fabrication primer for application by manual or automatic spray.

**Intended Uses** As a temporary protective primer for the coating of steelwork prior to the fabrication process.  
 Suitable for overcoating with a wide range of high performance coating systems for use in a variety of environments, including offshore structures, coastal environments, chemical and petrochemical plants, power stations and bridges.

**Practical Information for Interplate 317**

<b>Colour</b>	Grey			
<b>Gloss Level</b>	Matt			
<b>Volume Solids</b>	28%			
<b>Typical Thickness</b>	15 microns (0.6 mils) dry equivalent to 54 microns (2.1 mils) wet			
<b>Theoretical Coverage</b>	18.67 m <sup>2</sup> /litre at 15 microns d.f.t and stated volume solids 748.5 sq.ft/US gallon at 0.6 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, Brush, Roller			
<b>Drying Time</b>				
			Overcoating Interval with recommended topcoats	
Temperature	Touch Dry	Hard Dry	<i>Minimum</i>	<i>Maximum</i>
10°C (50°F)	2-3 minutes	6-8 minutes	24 hours	Extended*
15°C (59°F)	2-3 minutes	6-8 minutes	24 hours	Extended*
25°C (77°F)	2-3 minutes	5 minutes	24 hours	Extended*
40°C (104°F)	2-3 minutes	4 minutes	24 hours	Extended*

\* See International Protective Coatings Definitions & Abbreviations

**Regulatory Data**

<b>Flash Point</b>	Paste (Part A) 5°C (41°F)	Binder (Part B) -18°C (0°F)	Mixed -18°C (0°F)
<b>Product Weight</b>	1.5 kg/l (12.5 lb/gal)		
<b>VOC</b>	609 g/l (5.08 lb/gal) (Calculated)		

# Interplate 317

Zinc 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 8504:1992.

Where necessary, remove weld spatter, and where required smooth weld seams and sharp edges.

Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

### Abrasive Blast Cleaning

Abrasive blast clean to Sa2½ (ISO 8501-1:1988) or SSPC-SP6. If oxidation has occurred between blasting and application of Interplate 317, 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.

The blast profile achieved should have an angular configuration. Blasting media should be steel grit of a nominal size of 0.6-1.0 mm (24-40 mils) or a mixture with steel shot of a nominal size of 0.6-1.4 mm (24-56 mils).

This product is NOT recommended over hand prepared steel.

## Application

### Mixing

Interplate 317 is supplied in 2 parts, a paste component (Part A) and liquid binder component (Part B). The Binder (Part B) should be slowly added to the Paste (Part A) whilst stirring with a mechanical agitator. DO NOT ADD PASTE TO LIQUID. Material should be sieved 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.

This is a low viscosity material and agitation is required during application to ensure homogeneity is maintained.

### Mix Ratio

1 Part A : 1 Part B by volume.

### Working Pot Life

10°C (50°F)	15°C (59°F)	25°C (77°F)	40°C (104°F)
7 hours	6 hours	6 hours	4½ hours

### Airless Spray

Recommended - Automatic plant preferred - Tip range 0.53-0.64 mm (21-25 thou)  
Manual Application - Tip range 0.43-0.53 mm (17-21 thou)  
- Total output fluid pressure at spray tip not less than 70-141 kg/cm<sup>2</sup> (1,000-2,000 p.s.i.)

### Air Spray (Pressure Pot)

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

### Air Spray (Conventional)

Recommended Use suitable proprietary equipment.

### Brush

Suitable - Touch up and small areas only

### Roller

Suitable - Touch up and small areas only

### Thinner

International GTA136 Do not thin more than allowed by local environmental legislation.

### Cleaner

International GTA803

### Work Stoppages

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.

### Clean Up

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, relative humidity and elapsed time, including any delays.

All surplus materials and empty containers should be disposed of in accordance with appropriate regional regulations/legislation.

# Interplate 317

Zinc Silicate

## Product Characteristics

Satisfactory welding properties will only be obtained by strict control of application to the recommended film thickness. Over-application of Interplate 317 will result in increased levels of weld fume on cutting and welding, and will also increase the porosity of the welds.

Interplate 317 is designed for application by automatic plant, if small areas are to be hand sprayed, take care to avoid dry spray and over-application.

Note, this product dries too quickly to enable accurate wet film thickness measurements.

Failure to obtain an even film and coverage of blast profile will result in rapid rusting on exposure to weathering.

The drying times quoted are for the recommended dry film thicknesses at the stated temperatures when using automated process. Failure to adhere to these parameters can result in damage to equipment, rollers and disruption of the coated surface due to handling damage on stacking. Best results are obtained by using steel preheated to a temperature of at 40°C (104°F).

Thicker films of Interplate 317 will provide longer periods of corrosion resistance, but will compromise welding, cutting and handling properties. 25 microns (1 mil) is the recommended dry film thickness to obtain 6-9 months protection in most environments.

Satisfactory curing for overcoating within 24 hours will not be achieved at relative humidities less than 50%. At relative humidities below 50%, curing will be severely retarded and humidity may need to be increased by steam or water spraying.

Interplate 317 is compatible with both sacrificial and impressed current cathodic protection.

Prior to overcoating, Interplate 317 must be clean, dry and free from both soluble salts and excessive zinc corrosion products.

For further information on application, handling and weathering properties, consult International Protective Coatings.

This product has the following specification approvals:

Lloyds Register of shipping - Welding Approval of Prefabrication Primer

Det Norske Veritas - Shop Primers for Corrosion Protection of Steel Plates and Structures

Bureau Veritas - Shop Primers for Welded Steel Structures

Germanischer Lloyd - Approved for Overweldable Shop Primers

## Systems Compatibility

Interplate 317 can be overcoated with a number of high performance systems suitable for steel protection in a wide range of atmospheric exposure and immersed conditions.

The following products can be applied directly to Interplate 317:-

Intercure 200	Interseal 670HS
Intercure 420	Intershield 300
Intergard 251	Interzone 505
Intergard 269	Interzone 954
Intergard 343	Interzone 1000
Intergard 475HS	

For other suitable topcoats, consult International Protective Coatings.

# Interplate 317

Zinc Silicate

## 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
- Practical & Theoretical 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.

<b>Pack Size</b>	20 litre unit	Interplate 317 Paste, Part A	10 litres in a 20 litre container
		Interplate 317 Binder, Part B	10 litres in a 10 litre polyethylene container
	For availability of other pack sizes contact International Protective Coatings		
<b>Shipping Weight</b>	U.N. Shipping No. 1263		
	20 litre unit	21.89 kg (48.25 lbs) Paste (Part A)	9.31 kg (20.52 lbs) Binder (Part B)
<b>Storage</b>	Shelf Life	12 months (Part A), 6 months (Part B) minimum at 25°C (77°F). Subject to re-inspection thereafter. Store in dry, shaded conditions away from sources of heat and ignition.	

## 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 for 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: 21/04/2004*

Copyright © International Paint Ltd. \* and International are trademarks.

## International Protective Coatings

<u>World Centre</u>	<u>Asia Region</u>	<u>Australasia Region</u>	<u>Europe Region</u>	<u>Middle East Region</u>	<u>North America Region</u>	<u>South America Region</u>
P.O Box 20980 Oriel House 16 Connaught Place London, W2 2ZB England	3 Neythal Road Jurong Town Singapore 628570	115 Hyde Road Yeronga Brisbane Queensland Australia	P.O Box 20980 Oriel House 16 Connaught Place London, W2 2ZB England	PO Box 37 Dammam 31411 Saudi Arabia	6001 Antoine Drive Houston Texas 77091	Av Paiva 999, Neves, Sao Gonçalo, Rio de Janeiro Brazil
Tel: (44) 20 7479 6000 Fax: (44) 20 7479 6500	Tel: (65) 663 3066 Fax: (65) 266 5287	Tel: (61) 7 3892 8888 Fax: (61) 7 3892 4287 H&S (61) 1800 807 001	Tel: (44) 20 7479 6000 Fax: (44) 20 7479 6500	Tel: (966) 3 812 1044 Fax: (966) 3 812 1169	Tel: (1) 713 682 1711 Fax: (1) 713 684 1514	Tel: (55) 21 624 7100 Fax: (55) 21 624 7123

### Local Office:

Tel: 0191 469 6111 Fax: 0191 495 0676