Interzinc 12

Inorganic Zinc-Rich Silicate

International Protective Coatings

WORLD WIDE PRODUCT RANGE

Product Description

A two component solvent based inorganic zinc-rich ethyl silicate primer.

Complies with the composition and performance requirements of SSPC Paint 20.

Intended Uses

As a metallic zinc pigmented primer to provide excellent protection to steel substrates, for use with a wide range of high performance systems in offshore and onshore environments including oil production platforms, refineries, bridges, tanks, pipework and structural steelwork.

Ideal for giving long term protection to structural steel prior to field topcoating.

Can be used for new construction and as fast drying primer, capable of application in a wide range of climatic conditions including low temperatures.

Practical Information for Interzinc 12

Colour	Greenish Grey
Gloss Level	Matt
Volume Solids	62%
Typical Thickness	50-75 microns (2-3 mils) dry equivalent to 81-121 microns (3.2-4.8 mils) wet
Theoretical Coverage	8.27 m^2/litre at 75 microns d.f.t and stated volume solids 331 sq.ft/US gallon at 3 mils d.f.t and stated volume solids
Practical Coverage	Allow appropriate loss factors
Method of Application	Airless spray, Air spray

Drying Time

Temperature	Touch Dry	Hard Dry	Overcoating Interval with recommended topcoats▲ *Minimum*	*Maximum*
5°C (41°F)	40 minutes	4 hours	24-48 hours	Extended*
15°C (59°F)	20 minutes	2 hours	16-24 hours	Extended*
25°C (77°F)	15 minutes	1 hour	16-24 hours	Extended*
40°C (104°F)	5 minutes	30 minutes	8-12 hours	Extended*

▲ Overcoating is dependent upon ambient conditions. The figures quoted above have been determined at the quoted dry film thickness, temperature and 65% relative humidity. See Product Characteristics for further advice.

* See International Protective Coatings Definitions and Abbreviations.

Regulatory Data

Flash Point	Binder (Part A) 15°C (59°F)	Powder (Part B) N/A	Mixed 16°C (61°F)
Product Weight	2.4 kg/l (19.6 lb/gal)		
VOC	458 g/l	UK - PG6/23(92), Appendix 3	
	3.76 lb/gal (451 g/l)	USA - EPA Method 24	

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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 8504:1992.

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 (SSPC-SP10 for optimum performance). If oxidation has occurred between blasting and application of Interzinc 12, 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

Interzinc 12 is suitable for application to steelwork freshly coated with 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 8501-1:1988) or SSPC-SP6.

Damaged/Repair Areas

All damaged areas should ideally be blast cleaned to Sa2½ (ISO 8501:1988) 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

Mixing

Interzinc 12 is supplied in 2 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 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 specified.

Mix Ratio

3.65 parts : 1 part by volume

Working Pot Life

5°C (41°F)	15°C (59°F)	25°C (77°F)	40°C (104°F)
12 hours	8 hours	4 hours	2 hours

Airless Spray

Recommended

- Tip range 0.38-0.53 mm (15-21 thou)
- Total output fluid pressure at spray tip not less than 112 kg/cm² (1,600 p.s.i.)
- A 9 mm (3/8") fluid hose of maximum 15 metres(49 ft) is recommended.

Air Spray (Pressure Pot)

Recommended

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

Brush

Small areas only

Typically 25-50 microns (1-2 mils) will normally be achieved.

Roller

Not recommended

Thinner

International GTA803 (or GTA415)

Do not thin more than allowed by local environmental legislation.

Cleaner

International GTA803 (or GTA415)

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.

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Product Characteristics

Prior to overcoating, Interzinc 12 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 Interzinc 12 in confined spaces ensure adequate ventilation.

The minimum overcoating interval is dependent upon the relative humidity during cure. Below 65% relative humidity the minimum recoat period will normally be at least 24 hours, but will be dependent upon the dry film thickness, 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.

At relative humidities below 50%, curing will be severely retarded and humidity may need to be increased by steam or water spraying. Alternatively, the use of Interzinc accelerator solution may be necessary. Please consult International Protective Coatings for further details in this situation.

For high temperature service, the thickness of Interzinc 12 should be restricted to 50 microns (2 mils) dry film thickness. Continuous dry temperature resistance of Interzinc 12 is 400°C (752°F) if left untopcoated, however, if this product is used as a primer for Intertherm 50 the dry temperature resistance will be 540°C (1004°F).

Excessive film thickness and/or over-application of Interzinc 12 will 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 the application of dry film thicknesses in excess of 125 microns (5.0 mils).

Untopcoated Interzinc 12 is not suitable for exposure in acid or alkaline conditions or continuous water immersion.

This product has the following specification approvals:

SSPC Paint Specification No. 20

Systems Compatibility

When it is necessary for Interzinc 12 to be overcoated by itself due to low dry film thickness, the coating surface must be fresh and unweathered. A minimum of 50 microns (2 mils) dry film thickness. of any subsequent coat of Interzinc 12 is needed to ensure good film formation.

Before overcoating with recommended topcoats ensure the Interzinc 12 is fully cured (see above), and if weathering has occurred all zinc salts should be removed from the surface by fresh water washing, and if necessary scrubbing with bristle brushes.

Typical topcoats are:

- Intercryl 530
- Intercure 200
- Intercure 420
- Intergard 251
- Intergard 269
- Intergard 475HS
- Interseal 670HS
- Intertherm 50
- Intertherm 715

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 12, surface roughness and ambient conditions during curing application. Alternatively, an epoxy sealer coat, such as Intergard 269, can be used to eliminate bubbling problems.

For other suitable intermediates/topcoats, 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	15 litre unit	Interzinc 12 Binder Interzinc 12 Powder	11.77 litres in a 15 litre plastic bottle 3.23 litres in a 20 litre container
	4.65 gallon unit	Interzinc 12 Binder Interzinc 12 Powder	3.65 gallons in a 5 gallon container 1.01 gallons in a 3 gallon container
	For availability of other pack sizes contact International Protective Coatings		
Shipping Weight	U.N. Shipping No. 1263		
	15 litre unit	13.5 kg (29.7 lb) Binder (Part A) 24.8 kg (54.7 lb) Powder (Part B)	
	4.65 gallon unit	17.1 kg (37.7 lb) Binder (Part A) 28.5 kg (62.8 lb) Powder (Part B)	
Storage	Shelf Life	6 months minimum at 25°C (77°F). Subject to re-inspection thereafter. Store in dry, shaded conditions away from sources of heat and ignition.	

Disclaimer

International Protective Coatings

Worldwide Availability

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