

Interzinc 22

Inorganic Zinc-Rich Silicate

WORLD WIDE PRODUCT RANGE



Product Description

A two component solvent based inorganic zinc rich ethyl silicate primer, containing 85% zinc by weight, in the dry film. Complies with the composition and performance requirements of SSPC Paint 20.

Available in ASTM D520, Type II zinc dust version.

Intended Uses

A metallic zinc primer suitable for use with a wide range of high performance systems and topcoats in both maintenance and new construction of bridges, tanks, pipework, offshore structures and structural steelwork.

Provides excellent corrosion protection for correctly prepared steel substrates, up to temperatures of 540°C (1004°F) when suitably topcoated.

Fast drying primer capable of application in a wide range of climatic conditions.

Practical Information for Interzinc 22

Colour	Greenish grey
Gloss Level	Matt
Volume Solids	63%
Typical Thickness	50-75 microns (2-3 mils) dry equivalent to 79-119 microns (3.2-4.8 mils) wet
Theoretical Coverage	8.4 m ² /litre at 75 microns d.f.t and stated volume solids 337 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)	30 minutes	3 hours	36-48 hours	Extended*
15°C (59°F)	20 minutes	90 minutes	24-36 hours	Extended*
25°C (77°F)	10 minutes	60 minutes	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 temperature and 65% relative humidity. See Product Characteristics for further advice.

* See International Protective Coatings Definitions & Abbreviations

Maximum overcoating intervals are shorter when using polysiloxane topcoats. Consult International Protective Coatings for further details.

Regulatory Data

Flash Point	Binder (Part A) 14°C (57°F)	Powder (Part B) N/A	Mixed 15°C (59°F)
Product Weight	2.5 kg/l (21.2 lb/gal)		
VOC	480 g/l	UK - PG6/23(92), Appendix 3	
	4.09 lb/gal (490 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 a minimum of Sa2½ (ISO 8501-1:1988) or SSPC-SP6 (or SSPC-SP10 for optimum performance). If oxidation has occurred between blasting and application of Interzinc 22, 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 22 is suitable for application to unweathered 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 22 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 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.

Mix Ratio

3.17 parts : 1.00 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) can 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 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

Interzinc 22 is available in various low lead zinc dust versions dependent upon local legislation/project specification. When utilising the ASTM D520 Type II specification, the appropriate zinc dust grade must be used. Contact International Protective Coatings for further details.

Prior to overcoating, Interzinc 22 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 22 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 ambient temperature and relative humidity during the application and curing period.

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 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.

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

For high temperature systems the thickness of Interzinc 22 should be restricted to 50 microns (2 mils) d.f.t. Continuous dry temperature resistance of Interzinc 22 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).

Untopcoated Interzinc 22 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 Type 1C
BS5493 (1977) : EP2A
Shell Specification 40.48.00.30 V1 (g)
ASTM A490 Class B Slip Coefficient
BS4604 Friction Grip

Systems Compatibility

When it is necessary for Interzinc 22 is 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) d.f.t of any subsequent coat of Interzinc 22 is needed to ensure good film formation.

Before overcoating with recommended topcoats ensure the Interzinc 22 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 and intermediates are:

Intercryl 530	Intergard 345
Intercure 200	Intergard 475HS
Intercure 200HS	Interseal 670HS
Intercure 420	Intertherm 50
Interfine 979	Intertherm 715
Intergard 251	Intertherm 875
Intergard 269	

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 22, 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.

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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	14 litre unit	Interzinc 22 Binder Interzinc 22 Powder	10.64 litres in 15 litre plastic bottle 3.36 litres in 20 litre container
	5 gallon unit	Interzinc 22 Binder Interzinc 22 Powder	3.8 gallons in a 5 gallon plastic container 1.2 gallons in a 5 gallon container
For availability of other pack sizes contact International Protective Coatings			
Shipping Weight	U.N. Shipping No. 1263		
	14 litre unit	11.7 kg (25.8 lb) Binder (Part A)	25.8 kg (56.75 lb) Powder (Part B)
	5 gallon unit	17.01 kg (37.5 lb) Binder (Part A)	30.0 kg (66.2 lb) Powder (Part B)
Storage	Shelf Life		
	Binder: 6 months minimum at 25°C (77°F). Powder: 12 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

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: 18/01/2005

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International Protective Coatings

Worldwide Availability

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