

Epoxy Zinc-Rich

PRODUCT DESCRIPTION

A two component, metallic zinc rich epoxy primer which complies with the composition and performance requirements of SSPC Paint 20.

INTENDED USES

As a high performance primer to give maximum protection as part of any anti-corrosive coating system for aggressive environments including those found on offshore structures, petrochemical facilities, pulp and paper plants, bridges and power plants. Interzinc 52 has been designed to provide excellent corrosion resistance in both maintenance and new construction situations.

PRACTICAL INFORMATION FOR INTERZINC 52

| | |
|------------------------------|---|
| Color | Blue, Gray, Green - Color availability will vary by region |
| Gloss Level | Matte |
| Volume Solids | 59% ± 2% |
| Typical Thickness | 2-3 mils (50-75 microns) dry equivalent to 3.4-5.1 mils (85-127 microns) wet |
| Theoretical Coverage | 315 sq.ft/US gallon at 3 mils d.f.t and stated volume solids 7.87 m ² /liter at 75 microns d.f.t and stated volume solids |
| Practical Coverage | Allow appropriate loss factors |
| Method of Application | Airless Spray, Air Spray, Brush |

Drying Time

| Temperature | Touch Dry | Hard Dry | Overcoating Interval with recommended topcoats | |
|--------------|------------|----------|--|-----------------------|
| | | | Minimum | Maximum |
| 41°F (5°C) | 2 hours | 10 hours | 8 hours | Extended ¹ |
| 59°F (15°C) | 90 minutes | 6 hours | 4 hours | Extended ¹ |
| 77°F (25°C) | 75 minutes | 4 hours | 3 hours | Extended ¹ |
| 104°F (40°C) | 45 minutes | 2 hours | 2 hours | Extended ¹ |

¹ See International Protective Coatings Definitions & Abbreviations

For curing at low temperatures an alternative curing agent is available. See Product Characteristics for details. Maximum overcoating intervals are shorter when using polysiloxane topcoats. Consult International Protective Coatings for further details.

REGULATORY DATA

Flash Point (Typical) Part A 84°F (29°C); Part B 86°F (30°C); Mixed 84°F (29°C)

Product Weight 21.0 lb/gal (2.52 kg/l)

VOC 2.80 lb/gal (336 g/l) EPA Method 24
152 g/kg EU Solvent Emissions Directive (Council Directive 2010/75/EC)
360 g/lit (3.00 lb/US Gal) Chinese National Standard GB23985

See Product Characteristics section for further details

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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 8504:2019.

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

Abrasive Blast Cleaning

Abrasive blast clean to a minimum of SSPC-SP6 or Sa2½ (ISO 8501-1:2007). If oxidation has occurred between blasting and application of Interzinc 52, 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 1.6-3.0 mils (40-75 microns) is recommended.

Shop Primed Steelwork

Interzinc 52 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 cleaned to a minimum St3 (ISO 8501-1:2007) or SSPC-SP3. Optimum performance will be achieved with blasting to Sa2½ (ISO 8501-1:2007) or SSPC-SP6; where this is not practical, power tool preparation to SSPC-SP11 is recommended.

APPLICATION

| | | | | |
|---------------------------------|---|--|------------------------|-------------------------|
| Mixing | 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 Base (Part A) with a power agitator. | | |
| | (2) | Combine entire contents of Curing Agent (Part B) with Base (Part A) and mix thoroughly with power agitator. | | |
| Mix Ratio | 4 part(s) : 1 part(s) by volume | | | |
| Working Pot Life | 41°F (5°C) 24 hours | 59°F (15°C) 12 hours | 77°F (25°C) 5 hours | 104°F (40°C) 2 hours |
| Airless Spray | Recommended | Tip Range 17-21 thou (0.43-0.53 mm) Total output fluid pressure at spray tip not less than 2503 psi (176 kg/cm ²) | | |
| Air Spray (Pressure Pot) | Recommended | Gun | DeVilbiss MBC or JGA | |
| | | Air Cap | 704 or 765 | |
| | | Fluid Tip | E | |
| Brush | Suitable - Small areas only | Typically 2.0-3.0 mils (50-75 microns) can be achieved | | |
| Roller | Not recommended | | | |
| Thinner | International GTA220 (or International GTA415) | Thinning is not normally required. Consult the local representative for advice during application in extreme conditions. Do not thin more than allowed by local environmental legislation. | | |
| Cleaner | International GTA822 (or International GTA415) | Choice of cleaner may be subject to local legislation. Please consult your local representative for specific advice. | | |
| Work Stoppages | Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with International GTA822. 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 GTA822. 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

In order to ensure good anti-corrosive performance, it is important to achieve a minimum dry film thickness of Interzinc 52 of 1.5 mils (40 microns). To achieve a uniform, coalesced, closed film at this dry film thickness, it will be necessary to thin Interzinc 52 with 10% with International thinners. The film thickness of Interzinc 52 applied must be compatible with the blast profile achieved during surface preparation. Low film thickness should not be applied over coarse blast profiles.

Care should be exercised to avoid the application of dry film thicknesses in excess of 6 mils (150 microns). Care should be exercised to avoid over-application which may result in cohesive film failure with subsequent high builds, and to avoid dry spray which can lead to pinholing of subsequent coats. Over-application will also result in slower curing and extended handling and overcoating times. Over-application of Interzinc 52 will extend both the minimum overcoating periods and handling times, and may be detrimental to long term overcoating properties.

When Interzinc 52 is allowed to weather before topcoating ensure all zinc salts are removed prior to paint application and only topcoat with recommended materials.

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

Interzinc 52 is not typically recommended for underwater use, unless specific approvals allow this. Please consult International Protective Coatings for confirmation on the intended specification and service conditions.

Interzinc 52 is suitable for the localized repair of damaged inorganic zinc primer - consult International Protective Coatings for specific advice.

Low Temperature Curing

An alternative curing agent is available for applications at temperatures less than 41°F (5°C). When using this alternative curing agent it should be noted that the VOC will increase to 384 g/l (EPA Method 24) and the Part B flash point is 79°F (24°C).

Interzinc 52 is capable of curing at temperatures below 32°F (0°C). However, this product should not be applied at temperatures below 32°F (0°C) where there is a possibility of ice formation on the substrate.

| Temperature | Touch Dry | Hard Dry | Minimum overcoating interval with recommended topcoats | | Pot Life |
|-------------|------------|-----------|--|----------------|-----------|
| | | | <i>Minimum</i> | <i>Maximum</i> | |
| 23°F (-5°C) | 3 hours | 31 hours | 31 hours | Extended* | 18 hours |
| 32°F (0°C) | 2.5 hours | 16 hours | 16 hours | Extended* | 18 hours |
| 41°F (5°C) | 30 minutes | 4 hours | 4 hours | Extended* | 18 hours |
| 59°F (15°C) | 20 minutes | 3.5 hours | 3.5 hours | Extended* | 8 hours |
| 77°F (25°C) | 15 minutes | 3 hours | 3 hours | Extended* | 2.5 hours |

Touch dry times shown above are actual drying times due to chemical cure, rather than physical set due to solidification of the coating film at temperatures below 32°F (0°C).

*See International Protective Coatings Definitions & Abbreviations

For further details regarding cure times and overcoatability, please contact International Protective Coatings.

This product has the following specification approvals:

- Steel Structures Painting Council - SSPC Paint 20

On consultation with International Protective Coatings this product is compatible with alternative application methods such as flow coating.

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 color 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

Interzinc 52 is designed for application to correctly prepared steel. It is possible to apply over approved prefabrication primers. Details of these can be obtained from International Protective Coatings. Recommended topcoats are:

| | |
|-----------------|-----------------|
| Intercure 200 | InterH2O 401 |
| Intercure 420 | Interseal 670HS |
| Interfine 629HS | Interthane 990 |
| Intergard 251 | Interthane 990E |
| Intergard 269 | Interzone 1000 |
| Intergard 475HS | Interzone 505 |
| Intergard 740 | Interzone 954 |

For other suitable 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 documents available at 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 Safety Data Sheet and the container(s), and should not be used without reference to the Safety Data Sheet (SDS).

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 AkzoNobel for further advice.

| PACK SIZE | Unit Size | Part A | | Part B | |
|--|------------|--|------------|------------|-----------|
| | | Vol | Pack | Vol | Pack |
| | 10 liter | 8 liter | 10 liter | 2 liter | 2.5 liter |
| | 3 US gal | 2.4 US gal | 3.5 US gal | 0.6 US gal | 1 US gal |
| For availability of other pack sizes, contact AkzoNobel. | | | | | |
| SHIPPING WEIGHT (TYPICAL) | Unit Size | Part A | | Part B | |
| | 10 liter | 24.5 kg | | 2.1 kg | |
| | 3 US gal | 63.3 lb | | 5.3 lb | |
| STORAGE | Shelf Life | 12 months minimum at 77°F (25°C). Subject to re-inspection thereafter. Store in dry, shaded conditions away from sources of heat and ignition. | | | |

Disclaimer

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.

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