

Epoxy

PRODUCT DESCRIPTION

A two component, low VOC, high solids, fast curing anti-corrosive epoxy coating.

Both zinc phosphate and micaceous iron oxide pigmented versions are available. The micaceous iron oxide version conforms to BS5493:1977 KUID & KUIF.

INTENDED USES

Specifically designed for application to abrasive blasted steel in atmospheric areas. Ideal for use in moderately corrosive environments and where fast drying/rapid recoating is desired.

In maintenance and repair areas, an aluminium pigmented version is available for use over hand prepared and hydroblasted steel surfaces.

PRACTICAL INFORMATION FOR INTERSEAL 1052

Colour	Limited range
Gloss Level	Semi Gloss
Volume Solids	83%
Typical Thickness	75-250 microns (3-10 mils) dry equivalent to 90-301 microns (3.6-12 mils) wet
Theoretical Coverage	6.64 m ² /litre at 125 microns d.f.t and stated volume solids 266 sq.ft/US gallon at 5 mils d.f.t and stated volume solids
Practical Coverage	Allow appropriate loss factors
Method of Application	Airless Spray, Brush, Roller

Drying Time

Temperature	Touch Dry	Hard Dry	Overcoating Interval with recommended topcoats	
			Minimum	Maximum
5°C (41°F)	8 hours	24 hours	24 hours	Extended ¹
15°C (59°F)	4 hours	8 hours	8 hours	Extended ¹
25°C (77°F)	2 hours	5 hours	5 hours	Extended ¹
40°C (104°F)	90 minutes	4 hours	4 hours	Extended ¹

¹ See International Protective Coatings Definitions and Abbreviations

For curing at low temperatures an alternative curing agent is available. See Product Characteristics for details.

REGULATORY DATA

Flash Point (Typical)	Part A 25°C (77°F); Part B 28°C (82°F); Mixed 30°C (86°F)		
Product Weight	1.627 kg/l (13.6 lb/gal)		
VOC	141 g/kg	EU Solvent Emissions Directive (Council Directive 2010/75/EU)	
	171 g/lit	Chinese National Standard GB23985	

See Product Characteristics section for further details

Protective Coatings

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SURFACE PREPARATION

The performance of this product will depend upon the degree of surface preparation. The surface 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-SP6. If oxidation has occurred between blasting and application of Interseal 1052, 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.

Interseal 1052 is suitable for application to blast cleaned surfaces which were initially to the above standard but have been allowed to deteriorate under good shop conditions for up to 7-10 days. The surface may deteriorate to Sa2 standard but must be free from loose powdery deposits.

Hand or Power Tool Preparation (Aluminium version only)

Hand or power tool clean to a minimum of St2 (ISO 8501-1:2007) or SSPC-SP2.

Note, all scale must be removed and areas which cannot be prepared adequately by chipping or needle gun should be spot blasted to a minimum standard of Sa2 (ISO 8501-1:2007) or SSPC-SP6. Typically this would apply to C or D grade rusting in this standard.

Ultra High Pressure Hydroblasting / Abrasive Wet Blasting (Aluminium version only)

May be applied to surfaces prepared to Sa2½ (ISO 8501-1:2007) or SSPC-SP6 which have flash rusted to no worse than Grade HB2½M (refer to International Hydroblasting Standards) or Grade SB2½M (refer to International Slurry Blasting Standards). It is also possible to apply to damp surfaces in some circumstances. Further information is available from International Protective Coatings.

Shop Primed Steelwork

Weld seams and damaged areas should be blast cleaned to Sa2½ (ISO 8501-1:2007) or SSPC-SP6.

If the shop primer shows extensive or widely scattered breakdown overall sweep blasting may be necessary.

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	5°C (41°F) 2.5 hours	15°C (59°F) 2 hours	25°C (77°F) 2 hours	40°C (104°F) 75 minutes
Airless Spray	Recommended	Tip Range 0.48-0.66 mm (19-26 thou) Total output fluid pressure at spray tip not less than 176 kg/cm² (2503 p.s.i.)		
Brush	Suitable - small areas only	Typically 75-100 microns (3.0-4.0 mils) can be achieved		
Roller	Suitable - small areas only	Typically 75-100 microns (3.0-4.0 mils) can be achieved		
Thinner	International GTA220	Do not thin more than allowed by local environmental legislation.		
Cleaner	International GTA822			
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

Maximum film build in one coat is best attained by airless spray. When applying by methods other than airless spray, the required film build is unlikely to be achieved. Application by air spray may require a multiple cross spray pattern to attain maximum film build. Low or high temperatures may require specific application techniques to achieve maximum film build.

When applying Interseal 1052 by brush or roller, it may be necessary to apply multiple coats to achieve the required film build.

To achieve 75 microns dry film thickness via spray application, it is recommended that Interseal 1052 is thinned approximately 5% by volume using International GTA220.

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

When applying Interseal 1052 in confined spaces ensure adequate ventilation.

Interseal 1052 is not designed for continuous water immersion.

Condensation occurring during or immediately after application may result in a matt finish and an inferior film.

Level of sheen and surface finish are dependent on application method. Avoid using a mixture of application methods whenever possible.

In common with all epoxies Interseal 1052 will chalk and discolour on exterior exposure. However, these phenomena are not detrimental to anti-corrosive performance.

Where a durable cosmetic finish with good gloss and colour retention is required overcoat with recommended topcoats.

Interseal 1052 low temperature grade curing agent is available to enable more rapid cure at temperatures less than 5°C (41°F), however this curing agent will give an initial shade variation and more rapid discolouration on weathering.

The coating will appear hard dry after 26 hours at temperatures below 0°C (32°F). However minimum overcoating interval at 0°C (32°F) and -5°C (23°F) is 40 hours and 48 hours, respectively.

Interseal 1052 is capable of curing at temperatures lower than -5°C (23°F); however, cure time will be significantly prolonged at these temperatures.

This product should not be applied at temperatures below 0°C (32°F) where there is a possibility of ice formation on the substrate.

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.

<u>Pot Life</u>	-5°C (23°F)	0°C (32°F)	5°C (41°F)
	8 hours	5.5 hours	3 hours

SYSTEMS COMPATIBILITY

Interseal 1052 is normally applied directly to steel, however, it can be applied over the following primers:

Interzinc 52	Interzinc 22 series
Interzinc 72	

The following topcoats are recommended:

Intergard 345	Interthane 870
Intergard 740	Interthane 990
Interfine 691	Interthane 990E
Interfine 629HS	

For other suitable primers/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
	20 litre	16 litre	20 litre	4 litre	5 litre
For availability of other pack sizes, contact AkzoNobel.					

SHIPPING WEIGHT (TYPICAL)	Unit Size	Part A	Part B
	20 litre	28.8 kg	3.8 kg
	U.N. Shipping No. 1263		

STORAGE	Shelf Life	18 months minimum at 25°C (77°F). Subject to re-inspection thereafter. Store in dry, shaded conditions away from sources of heat and ignition.
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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 or 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.

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