

Modified Epoxy

PRODUCT DESCRIPTION

A two component, low VOC, high solids, modified epoxy barrier coat designed to give long term protection in a single coat application. Will continue to cure when immersed in water and has excellent cathodic disbondment resistance.

The surface tolerant nature of Interzone 954 allows for flexible application to a wide range of steel substrate conditions in maintenance and repair situations.

INTENDED USES

Primarily designed for use in offshore splashzone maintenance, where its continued cure under immersed conditions makes it ideal for coping with tidal movements and surges. May be applied to reoxidised and slightly damp surfaces. Interzone 954 has also found extensive use in a number of other corrosive environments including rail cars, pulp and paper plants, chemical plants, jetties and sluice gates.

As part of a non-slip deck system in conjunction with appropriate aggregate.

PRACTICAL INFORMATION FOR INTERZONE 954

Colour	Range available via the Chromascan system
Gloss Level	Gloss
Volume Solids	85% ± 3% (depends on colour)
Typical Thickness	250-500 microns (10-20 mils) dry equivalent to 294-588 microns (11.8-23.5 mils) wet
Theoretical Coverage	1.70 m ² /litre at 500 microns d.f.t and stated volume solids 68 sq.ft/US gallon at 20 mils d.f.t and stated volume solids
Practical Coverage	Allow appropriate loss factors
Method of Application	Airless Spray, Air Spray, Brush, Roller

Drying Time

Temperature	Touch Dry	Hard Dry	Overcoating Interval with recommended topcoats	
			Minimum	Maximum
-5°C (23°F)	22 hours	48 hours	48 hours	14 days ¹
5°C (41°F)	21 hours	40 hours	40 hours	14 days ¹
10°C (50°F)	14 hours	16 hours	16 hours	10 days ¹
25°C (77°F)	3.5 hours	5.5 hours	5.5 hours	7 days ¹
40°C (104°F)	90 minutes	3 hours	3 hours	5 days ¹

¹ Maximum overcoating intervals are shorter when using polysiloxane topcoats. Consult International Protective Coatings for further details.

Drying and overcoating times above refer to use with EAA984 curing agent. Please refer to page 3 for data on use with EAA964.

REGULATORY DATA

Flash Point (Typical)	Part A 37°C (99°F); Part B 37°C (99°F); Mixed 37°C (99°F)		
Product Weight	1.62 kg/l (13.5 lb/gal)		
VOC	1.87 lb/gal (225 g/l)	EPA Method 24	
	151 g/kg	EU Solvent Emissions Directive (Council Directive 2010/75/EU)	
	133 g/l	Chinese National Standard GB23985	

See Product Characteristics section for further details

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SURFACE PREPARATION

The performance of this product will depend upon the degree of surface preparation. The surface to be coated must be clean and free from contamination. Prior to paint application all surfaces should be assessed and treated in accordance with ISO 8504:2000.

Accumulated dirt and soluble salts must be removed. Dry bristle brushing will normally be adequate for accumulated dirt. Soluble salts should be removed by fresh water washing.

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 Interzone 954, 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 50-75 microns (2-3 mils) is recommended.

Hand or Power Tool Preparation

Hand or power tool clean to a minimum St3 (ISO 8501-1:2007) or SSPC-SP3 for atmospheric use only.

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

May be applied to surfaces prepared to Sa2 (ISO 8501-1:2007) or SSPC-SP6 which have flash rusted to no worse than Grade HB2M (refer to International Hydroblasting Standards). It is also possible to apply to damp surfaces in some circumstances. Further information is available from International Protective Coatings.

Aged Coatings

Interzone 954 is suitable for overcoating some sound intact aged coatings. To ensure compatibility, application and evaluation of a test patch is required.

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	10°C (50°F)	15°C (59°F)	25°C (77°F)	40°C (104°F)
	2 hours	60 minutes	45 minutes	20 minutes
Airless Spray	Recommended	Tip Range 0.53-0.66 mm (21-26 thou) Total output fluid pressure at spray tip not less than 176 kg/cm² (2503 p.s.i.)		
Air Spray (Pressure Pot)	Recommended	Gun	DeVilbiss MBC or JGA	
		Air Cap	62	
		Fluid Tip	AC	
Brush	Suitable	Typically 100-150 microns (4.0-6.0 mils) can be achieved		
Roller	Suitable	Typically 75-125 microns (3.0-5.0 mils) can be achieved		
Thinner	International GTA007 Maximum recommended thinning 5%	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. See Page 3 for further information.		
Cleaner	International GTA822 (or International GTA415)	Choice of cleaner maybe 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 clean equipment during the course of the working day. Frequency of cleaning will depend upon amount used, 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 Interzone 954 by brush or roller, it may be necessary to apply multiple coats to achieve the total specified system dry film thickness.

Surface temperature must always be a minimum of 3°C (5°F) above dew point. Throughout application and curing, ensure adequate ventilation and air flow are present, in order to prevent 'dead spots'; especially when application is in confined spaces. In special cases where overcoating is required and curing has been at low temperature and high relative humidity, ensure no amine bloom is present prior to application of subsequent topcoats. Where environmental conditions are appropriate, i.e. good ventilation and air flow, GTA220 may still be used (up to a maximum of 5%).

Condensation occurring during or immediately after application may result in a matt finish and an inferior film. Premature exposure to ponding water will cause a colour change, especially in dark colours.

In common with all epoxies, Interzone 954 will chalk and discolour on exterior exposure. Where a durable cosmetic finish with good gloss and colour retention is required overcoat with recommended topcoats.

When applied between tides on jetties, piling etc., Interzone 954 can be immersed within 30 minutes. This will lead to whitening of dark colours but will not affect ultimate anti-corrosive performance.

For use in atmospheric service a minimum dry film thickness of 350 microns (14 mils) is required in one coat when applied direct to steel, for water immersion a minimum of 450 microns (18 mils) dry film thickness is recommended. In each case protection can be achieved in a single coat application by airless spray. Interzone 954 is suitable for steelwork exposed under buried conditions (Im3 according to ISO 12944-2)

Interzone 954 can be used as a non-skid deck system by modification with addition of GMA132 (crushed flint) aggregate. Application should then be to a suitably primed surface. Typical thicknesses will be between 500-1,000 microns (20-40 mils). Preferred application is by a suitable large tip hopper gun (e.g. Sagola 429 or Air texture gun fitted with a 5-10 mm nozzle). Trowel or roller can be used for small areas. Alternatively, a broadcast method of application can be used. Consult International Protective Coatings for further details.

Interzone 954 is compatible with sacrificial and impressed current cathodic protection systems.

Alternative Curing Agent (EAA964)

<u>Temperature</u>	<u>Touch Dry</u>	<u>Hard Dry</u>	<u>Overcoating Interval with recommended topcoats</u>	
			<u>Minimum</u>	<u>Maximum</u>
10°C (50°F)	14 hours	24 hours	24 hours	14 days
15°C (59°F)	10 hours	18 hours	18 hours	10 days
25°C (77°F)	4 hours	8 hours	8 hours	7 days
40°C (104°F)	90 minutes	3 hours	3 hours	5 days
Working Pot Life	10°C (50°F) 3 hours	15°C (59°F) 2 hours	25°C (77°F) 90 minutes	40°C (104°F) 45 minutes

Do not apply at steel temperatures below 4°C (39°F).

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.

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

Interzone 954 will generally be applied to bare steel prepared by dry abrasive blasting, wet abrasive blasting or ultra high pressure hydroblasting.

The following primers are recommended for Interzone 954:

Intercure 200	Intergard 269 (for underwater use)
Intercure 200HS	Interline 982 (for underwater use)
Intergard 251	Interzinc 315
Interzinc 52	Interzone 1000

The following topcoats are recommended for Interzone 954:

Interfine 629HS	Intersleek 167
Interfine 878	Interthane 870
Interfine 979	Interthane 990
Intergard 740	Interzone 954

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
	5 US gal	4 US gal	5 US gal	1 US gal	1 US gal

For availability of other pack sizes, contact AkzoNobel.

SHIPPING WEIGHT (TYPICAL)	Unit Size	Part A	Part B
	20 litre	30.4 kg	4.6 kg
	5 US gal	56.4 lb	11.5 lb

STORAGE	Shelf Life	24 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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