

Universal Pipe Coating

PRODUCT DESCRIPTION

A high temperature universal pipe coating (UPC) that complies with the performance criteria of ISO12944-9 standard for corrosion protection in offshore environments.

Interbond 1202UPC is a two component, ambient cure, inorganic copolymer.

Conforms to the inert multi-polymeric matrix coating definition as per NACE SP0198 standard.

INTENDED USES

Suitable for protecting above-ground piping and accessories operating at temperatures between -196°C (-321°F) to +650°C (1202°F).

Interbond 1202UPC reduces paint complexity and overall painting costs of new construction projects by simplifying coating specifications for process piping and accessories.

Designed as a two coat or single coat application to carbon or stainless steel for long term corrosion protection.

Suitable for use on surfaces either uninsulated or under thermal insulation and for the protection of cryogenic piping and equipment. Not suitable for buried service.

PRACTICAL INFORMATION FOR INTERBOND 1202UPC

Colour	Metallic Grey			
Gloss Level	Matt			
Volume Solids	56%			
Typical Thickness	100-200 microns (4-8 mils) dry equivalent to 179-357 microns (7.2-14.3 mils) wet			
Theoretical Coverage	5.60 m ² /litre at 100 microns d.f.t and stated volume solids 225 sq.ft/US gallon at 4 mils d.f.t and stated volume solids			
Practical Coverage	Allow appropriate loss factors			
Method of Application	Airless Spray, Air Spray, Brush, Conventional Spray, Roller			
Drying Time	Overcoating interval with self			
Temperature	Touch Dry	Hard Dry	<i>Minimum</i>	<i>Maximum</i>
10°C (50°F)	90 minutes	6 hours	6 hours	14 days
15°C (59°F)	60 minutes	6 hours	6 hours	14 days
25°C (77°F)	30 minutes	3 hours	6 hours	14 days
40°C (104°F)	15 minutes	3 hours	6 hours	14 days

Where maximum overcoating intervals are exceeded, clean the surface of Interbond 1202UPC thoroughly with clean fresh water then lightly abrade.

REGULATORY DATA

Flash Point (Typical)	Part A 37°C (99°F); Part B 76°C (169°F); Mixed 39°C (102°F)		
Product Weight	1.25 kg/l (10.4 lb/gal)		
VOC	3.42 lb/gal (410 g/l)	EPA Method 24	
	311 g/kg	EU Solvent Emissions Directive (Council Directive 2010/75/EU)	
	405 g/l	Chinese National Standard GB23985	
See Product Characteristics section for further details			

Protective Coatings

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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 8504:2000. 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-SP10. If oxidation has occurred between blasting and application of Interbond 1202UPC, 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.

Power Tool Cleaning (Small Areas Only)

For small areas of touch up and repair, Power Tool cleaning to SSPC SP11 is suitable. Optimum performance will be achieved with a minimum surface profile of 50 microns (2 mils).

Austenitic Stainless Steel

Ensure surface is clean, dry and free from metal corrosion products prior to application. Abrasive blast with nonmetallic and chloride free abrasive (e.g. aluminium oxide or garnet) to obtain anchor profile of 37.5 to 50 microns (1.5 to 2 mils).

Optimum performance will be achieved for steel operating under high and cyclic temperature conditions when the preferred 50 microns (2 mils) profile is obtained.

Primed Surfaces

Interbond 1202UPC 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 8501-1:2007) or SSPC-SP6.

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.	
	Refer to Interbond 1202UPC Application Guidelines for more details.		
Mix Ratio	28 part(s) : 1 part(s) by volume		
Working Pot Life	10°C (50°F) 8 hours	15°C (59°F) 8 hours	25°C (77°F) 8 hours
			40°C (104°F) 4 hours
Airless Spray	Recommended	Tip Range 0.58-0.69 mm (23-27 thou) Total output fluid pressure at spray tip not less than 141 kg/cm ² (2005 p.s.i.)	
		To ensure easy application, all filters should be removed from the pump and gun.	
Air Spray (Pressure Pot)	Recommended when topcoating	Gun Air Cap Fluid Tip	DeVilbiss MBC or JGA 704 or 765 E
Air Spray (Conventional)	Recommended when topcoating	Use suitable proprietary equipment	
Brush	Suitable - touch up only	Typically 60 microns (2.4 mils) can be achieved	
Roller	Suitable - touch up only	Typically 60 microns (2.4 mils) can be achieved	
Thinner	International GTA007	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 GTA007	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 GTA007. Once units of material 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 GTA007. 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

The detailed Interbond 1202UPC Application Guidelines should be consulted prior to use.

Interbond 1202UPC conforms to the Inert Multipolymeric Matrix coating definition as per NACE Standard Practice SP0198 Table 2 typical recommendations for use on carbon steel equipment under thermal insulation.

When applying Interbond 1202UPC in confined spaces ensure adequate ventilation.

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

Interbond 1202UPC reacts with atmospheric moisture, and as such when in the can should remain covered at all times. If the tin is left open and not agitated for 30-60 minutes, a skin may form. This should be removed prior to re-mixing and continued application.

In common with many products containing leafing aluminium pigmentation Interbond 1202UPC may be prone to developing a "polished" appearance in areas of minor mechanical impact etc. However, this phenomenon is merely aesthetic and is not detrimental to the anti-corrosive performance of the product.

As with all coated surfaces, it is recommended that appropriate care be taken during storage and transport to avoid mechanical damage from dragging and scraping.

Due to the flexible nature of the coating and total recommended dry film thickness being at a minimum of 200 microns (8 mils), pull-off adhesion testing (as per ISO 4624) is not considered relevant. Adhesion should be evaluated using cross cut methods as specified in ASTM D3359. Acceptable rating achieved in practice is ≥3A.

When using in high heat service over inorganic zinc primer, the products should be applied in strict accordance with film thickness specifications, since application of excessive thicknesses may cause blistering or adhesion loss. Determine that the inorganic zinc primer is thoroughly cured prior to application of the high heat coating by following the curing instructions given on the relevant product data sheet.

When using a zinc silicate primer, the recommended thickness of zinc silicate is 50 microns (2 mils) dry film thickness to ensure maximum surface strength for any subsequent temperature cycling and to avoid flaking of topcoats. The maximum subsequent single coat thickness of Interbond 1202UPC should be 150 microns (6 mils), with a maximum total system dry film thickness of 300 microns (12 mils). It is preferable to overcoat zinc silicate before weathering but in cases where this is not possible then the zinc silicate surface should be clean and free of zinc corrosion products.

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

Interbond 1202UPC is normally applied direct to metal. This specialist coating is only compatible with a very limited number of products.

Suitable primers are:

Interzinc 22 Series

Overcoating of Interbond 1202UPC for colour identification purposes may be possible.

Suitable topcoats are:

Interthane 990
Intertherm 875

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
- Interbond 1202UPC Application Guidelines

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
	15 litre	14.48 litre	20 litre	0.52 litre	0.75 litre
	5 US gal	3.82 US gal	5 US gal	0.18 US gal	0.25 US gal
	1 US gal	0.77 US gal	1 US gal	0.03 US gal	1 US pint

For availability of other pack sizes, contact AkzoNobel.

SHIPPING WEIGHT (TYPICAL)	Unit Size	Part A	Part B
		15 litre	19.6 kg
5 US gal	43.9 lb	1.7 lb	
1 US gal	8.7 lb	0.4 lb	

STORAGE	Shelf Life	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.
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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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