

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 -321°F (-196°C) to 1202°F (+650°C).

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

Color	Metallic Gray			
Gloss Level	Matte			
Volume Solids	56%			
Typical Thickness	4 mils (100 microns) dry equivalent to 7.4 mils (185 microns) wet			
Theoretical Coverage	225 sq.ft/US gallon at 4 mils d.f.t and stated volume solids 5.60 m ² /liter at 100 microns 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>
50°F (10°C)	90 minutes	6 hours	6 hours	14 days
59°F (15°C)	60 minutes	6 hours	6 hours	14 days
77°F (25°C)	30 minutes	3 hours	6 hours	14 days
104°F (40°C)	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 99°F (37°C); Part B 169°F (76°C); Mixed 102°F (39°C)		
Product Weight	10.4 lb/gal (1.25 kg/l)		
VOC	3.42 lb/gal (410 g/l)	EPA Method 24	
	311 g/kg	EU Solvent Emissions Directive (Council Directive 1999/13/EC)	

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 8504:2000. Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

Abrasive Blast Cleaning

Abrasive blast clean to SSPC SP10 or Sa2½ (ISO 8501-1:2007). 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 2 mils (50 microns).

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 1.5 to 2 mils (37.5 to 50 microns).

Optimum performance will be achieved for steel operating under high & cyclic temperature conditions when the preferred 2 mil (50 micron) 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 SSPC-SP6 or Sa2½ (ISO 8501-1:2007).

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.		
	Agitate the material with a power mixer for a minimum of 5 minutes before application.			
Mix Ratio	28 part(s) : 1 part(s) by volume			
Working Pot Life	50°F (10°C)	59°F (15°C)	77°F (25°C)	104°F (40°C)
	8 hours	8 hours	8 hours	4 hours
Airless Spray	Recommended	Tip Range 19-21 thou (0.48-0.53 mm) Total output fluid pressure at spray tip not less than 2005 psi (141 kg/cm ²) 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 2.4 mils (60 microns) can be achieved		
Roller	Suitable - touch up only	Typically 2.4 mils (60 microns) 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			
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			

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appropriate regional regulations/legislation.

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PRODUCT CHARACTERISTICS 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 5°F (3°C) above dew point.

Interbond 1202UPC reacts with atmospheric moisture, and as such when in the can should remain covered at all times. Failure to keep tin covered will result in skinning of unused material and loss of pot life.

In common with many products containing leafing aluminum 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 8 mils (200 microns), 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 2 mils (50 microns) 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 6 mils (150 microns), with a maximum total system dry film thickness of 12 mils (300 microns). 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 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

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 color identification purposes may be possible.

Suitable topcoats are:

Interthane 990
Intertherm 875