

Universal Pipe Coating

PRODUCT DESCRIPTION

A high temperature pipe coating providing corrosion resistance in accordance with the ISO 12944-9 standard at ambient temperatures delivering productivity savings compared to inorganic zinc silicate and traditional epoxy phenolic based systems.

Based on alkylated amine epoxy technology, Interbond 2340UPC is a next generation epoxy phenolic coating for high temperature applications.

INTENDED USES

External protection for process pipes, valves and vessels operating between the temperatures of -321°F (-196°C) and 446°F (230°C).

Suitable for use in both new construction and maintenance & repair, on both carbon and stainless steel in insulated or uninsulated conditions, as well as cryogenic service.

Due to its superior high DFT tolerance, Interbond 2340UPC significantly reduces the risk of thick film cracking when compared to traditional epoxy phenolic coatings.

Interbond 2340UPC eliminates the temperature and humidity requirements associated with inorganic zinc coatings resulting in better quality and productivity in all climates.

Interbond 2340UPC has excellent resistance to "thermal shock" experienced during rapid temperature cycling.

PRACTICAL INFORMATION FOR INTERBOND 2340UPC

Color Gray, Pink, Olive Gray, Aluminum. Other colours regionally available; see page 3.
Gloss Level Not applicable

Volume Solids 60%

Typical Thickness 4-8 mils (100-200 microns) dry equivalent to 6.7-13.3 mils (167-333 microns) wet

Theoretical Coverage 120 sq.ft/US gallon at 8 mils d.f.t and stated volume solids
 3 m²/liter at 200 microns 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 self	
			Minimum	Maximum
23°F (-5°C)	7 hours	10 hours	14 hours	14 days
50°F (10°C)	5 hours	8 hours	10 hours	14 days
68°F (20°C)	4 hours	6 hours	7 hours	14 days
95°F (35°C)	2 hours	4 hours	4 hours	10 days

REGULATORY DATA

Flash Point (Typical) Part A 82°F (28°C); Part B 79°F (26°C); Mixed 82°F (28°C)

Product Weight 10.2 lb/gal (1.22 kg/l)

VOC

3.25 lb/gal (390 g/l)

EPA Method 24

318 g/kg

EU Solvent Emissions Directive
 (Council Directive 1999/13/EC)

333 g/l

Chinese National Standard GB23985

Protective Coatings

Interbond® 2340UPC

Universal Pipe Coating

See Product Characteristics section for further details



Universal Pipe Coating

SURFACE PREPARATION

All surfaces to be coated should be clean, dry and free from contamination. Prior to 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.

New Construction

For optimum performance and in new construction phase, Interbond 2340UPC should be applied to abrasive blast cleaned steel, minimum Sa2½ (ISO 8501-1:2007) or SSPC SP10. A sharp, angular surface profile of 2-3 mils (50-75 microns) is recommended. Apply Interbond 2340UPC before oxidation occurs. If oxidation does occur the entire oxidized area should be reblasted to the standard specified. Surface defects revealed by the blast cleaning process should be ground, filled, or treated in the appropriate manner.

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

Maintenance & Repair

For on-site planned maintenance and repair in some service conditions, Interbond 2340UPC may be applied to bare steel substrates prepared to a minimum of St2 (ISO 8501-1:2007). See application guidelines for further information.

Austenitic Stainless Steel

Ensure surface is clean, dry and free from metal corrosion products prior to application. Abrasive blast with non-metallic and chloride free abrasive (e.g. aluminum oxide or garnet) to obtain an average anchor profile of 1.4 mils (35 microns).

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	3 part(s) : 1 part(s) by volume			
Working Pot Life	23°F (-5°C)	50°F (10°C)	68°F (20°C)	95°F (35°C)
	6 hours	4.5 hours	3 hours	1 hour
Airless Spray	Recommended	Tip Range 19-24 thou (0.48-0.6 mm) Total output fluid pressure at spray tip not less than 3000 psi (211 kg/cm ²)		
Air Spray (Pressure Pot)	Suitable	Use suitable proprietary equipment.. Use 10% recommended thinner by volume.		
Air Spray (Conventional)	Not suitable			
Brush	Suitable - Small areas only	Typically 2.0-3.0 mils (50-75 microns) can be achieved		
Roller	Suitable - Small areas only	Typically 2.0-3.0 mils (50-75 microns) can be achieved		
Thinner	International GTA220	Not normally required except for air spray application.		
Cleaner	International GTA822 or International GTA220	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 GTA220. 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.			

Universal Pipe Coating

PRODUCT CHARACTERISTICS This product must only be thinned using International thinners. The use of alternative thinners, particularly those containing ketones, can severely inhibit the curing mechanism of the coating.

Apply by airless spray. Application by other methods, e.g. brush, roller, may require more than one coat and should only be used for small areas or touch-up work.

When applying Interbond 2340UPC by brush or roller, it may be necessary to apply multiple coats to achieve the total specified system dry film thickness.

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

After the last coat has cured hard, the coating system dry film thickness should be measured using a suitable non-destructive magnetic gauge to verify the average total applied system thickness. The coating system should be free of all pinholes or other holidays. The cured film should be essentially free of runs, sags, drips, inclusions or other defects. All deficiencies and defects should be corrected.

In common with all epoxies Interbond 2340UPC will chalk and "yellow" on exterior exposure. Interbond 2340UPC will also show a marked color change when exposed to higher temperatures. However, these phenomena are not detrimental to anti-corrosive performance provided recommended temperature limits are not exceeded.

Interbond 2340UPC is suitable for protection of insulated steelwork, which may cycle between wet and dry conditions, and is operating at continuous in-service temperatures ranging from -321°F (-196°C) to 401°F (205°C), with intermittent surges up to 446°F (230°C). In some regions and for operating temperatures from ambient up to 347°F (175°C), intermittent 446°F [230°C], a limited range of other colours is available; please contact AkzoNobel for further information.

When applying Interbond 2340UPC in confined spaces, ensure adequate ventilation.

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 2340UPC is normally applied direct to metal and is compatible with a number of topcoats.

Suitable topcoats are:

Interthane 870
Interthane 990
Intertherm 875

For advice on topcoat compatibility and overcoating windows please consult International Paint.

The maximum temperature resistance of the coating scheme may be limited by the topcoat.