

## 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 -196°C (-321°F) and 230°C (446°F).

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**

**Colour** Grey, Pink, Olive Grey, Aluminium. Other colours regionally available; see page 3.

**Gloss Level** Not applicable

**Volume Solids** 60%

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

**Theoretical Coverage** 3 m<sup>2</sup>/litre at 200 microns d.f.t and stated volume solids  
120 sq.ft/US gallon at 8 mils d.f.t and stated volume solids

**Practical Coverage** Allow appropriate loss factors

**Method of Application** Airless Spray, Brush, Roller

**Drying Time**

Overcoating interval with self

Temperature	Touch Dry	Hard Dry	Minimum	Maximum
-5°C (23°F)	7 hours	10 hours	14 hours	14 days
10°C (50°F)	5 hours	8 hours	10 hours	14 days
20°C (68°F)	4 hours	6 hours	7 hours	14 days
35°C (95°F)	2 hours	4 hours	4 hours	10 days

**REGULATORY DATA**

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

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

**VOC**

3.25 lb/gal (390 g/l)

EPA Method 24

318 g/kg

EU Solvent Emissions Directive  
(Council Directive 2010/75/EU)

333 g/l

Chinese National Standard GB23985

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 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 50-75 microns (2-3 mils) is recommended. Apply Interbond 2340UPC before oxidation occurs. If oxidation does occur the entire oxidised 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 50 microns (2 mils).

### 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. aluminium oxide or garnet) to obtain an average anchor profile of 35 microns (1.4 mils).

### APPLICATION

<b>Mixing</b>	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.			
<b>Mix Ratio</b>	3 part(s) : 1 part(s) by volume			
<b>Working Pot Life</b>	-5°C (23°F)	10°C (50°F)	20°C (68°F)	35°C (95°F)
	6 hours	4.5 hours	3 hours	1 hour
<b>Airless Spray</b>	Recommended	Tip Range 0.48-0.6 mm (19-24 thou) Total output fluid pressure at spray tip not less than 211 kg/cm <sup>2</sup> (3000 p.s.i.)		
<b>Air Spray (Pressure Pot)</b>	Suitable	Use suitable proprietary equipment. Use 10% recommended thinner by volume.		
<b>Air Spray (Conventional)</b>	Not suitable			
<b>Brush</b>	Suitable - small areas only	Typically 50-75 microns (2.0-3.0 mils) can be achieved		
<b>Roller</b>	Suitable - small areas only	Typically 50-75 microns (2.0-3.0 mils) can be achieved		
<b>Thinner</b>	International GTA220	Not normally required except for air spray application.		
<b>Cleaner</b>	International GTA822 or International GTA220	Choice of cleaner maybe subject to local legislation. Please consult your local representative for specific advice.		
<b>Work Stoppages</b>	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.			
<b>Clean Up</b>	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

This product must only be thinned using recommended 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 3°C (5°F) 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 colour 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 -196°C (-321°F) to 205°C (401°F), with intermittent surges up to 230°C (446°F). In some regions and for operating temperatures from ambient up to 175°C (347°F), intermittent 230°C [446°F], 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 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.

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### 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.

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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](http://www.international-pc.com):

#### Interbond 2340UPC Application Guidelines

- 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	15 litre	20 litre	5 litre	5 litre
	5 US gal	3 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	21.1 kg	5.2 kg
	5 US gal	36.9 lb	8.7 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.

### 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](http://www.international-marine.com) or [www.international-pc.com](http://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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