

# Intergard 400

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**Product Description**

A high build, two component epoxy, pigmented with lamellar micaceous iron oxide for enhanced corrosion resistance and improved overcoating properties after ageing.

**Intended Uses**

As a corrosion resistant high build primer/intermediate or finish coat, to provide excellent barrier protection as part of a high performance system in aggressive environments including offshore structures, bridges, chemical and petrochemical plants, and power stations.

The incorporation of plate-like micaceous iron oxide pigment, both increases the barrier effect and improves long term overcoating properties of the system, making this material ideally suitable for application in the fabrication shop, prior to shipping, with final overcoating at site.

Ideally suited as a damage and handling resistant coating which can be factory applied and then overcoated on site with minimum surface preparation.

Suitable for use in both new construction and industrial maintenance situations.

**Practical Information for Intergard 400**

<b>Colour</b>	Dark Grey, Silver Grey, Light Grey			
<b>Gloss Level</b>	Matt			
<b>Volume Solids</b>	65%			
<b>Typical Thickness</b>	100-150 microns (4-6 mils) dry equivalent to 154-231 microns (6.2-9.2 mils) wet			
<b>Theoretical Coverage</b>	5.2 m <sup>2</sup> /litre at 125 microns d.f.t and stated volume solids 208 sq.ft/US gallon at 5 mils d.f.t and stated volume solids			
<b>Practical Coverage</b>	Allow appropriate loss factors			
<b>Method of Application</b>	Airless spray, Air spray, Brush, Roller			
<b>Drying Time</b>				
			Overcoating Interval with recommended topcoats	
Temperature	Touch Dry	Hard Dry	<i>Minimum</i>	<i>Maximum</i>
10°C (50°F)	6 hours	24 hours	24 hours	Extended*
15°C (59°F)	4 hours	16 hours	20 hours	Extended*
25°C (77°F)	2 hours	8 hours	12 hours	Extended*
40°C (104°F)	1 hour	5 hours	8 hours	Extended*

\* See International Protective Coatings Definitions and Abbreviations.

**Regulatory Data**

<b>Flash Point</b>	Base (Part A) 25°C (77°F)	C/A (Part B) 23°C (73°F)	Mixed 25°C (77°F)
<b>Product Weight</b>	1.56-1.68 kg/l (13.02-14.02 lb/gal)		
<b>VOC</b>	380 g/l (3.17 lb/gal) UK - PG6/23(92), Appendix 3		

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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 8504:1992.

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

### Abrasive Blast Cleaning

Abrasive blast clean to Sa2½ (ISO 8501-1:1988) or SSPC-SP6. If oxidation has occurred between blasting and application of Intergard 400, 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.

### Shop Primed Surfaces

Weld seams and damaged areas should be blast cleaned to Sa2½ (ISO 8501-1:1988) or SSPC-SP6.

If the shop primer shows extensive or widely scattered breakdown overall sweep blasting may be necessary.

### Zinc Primed Surfaces

Ensure that the surface of the primer is clean, dry and free from contamination and zinc salts before application of Intergard 400. Ensure zinc primers are fully cured before overcoating.

## 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

5.67 parts : 1.0 part by volume

### Working Pot Life

10°C (50°F)	15°C (59°F)	25°C (77°F)	40°C (104°F)
8 hours	5 hours	3 hours	2 hours

### Airless Spray

Recommended - Tip range 0.48-0.63 mm (19-25 thou)  
- Total output fluid pressure at spray tip not less than 176 kg/cm<sup>2</sup> (2,500 p.s.i.)

### Air Spray (Pressure Pot)

Recommended	Gun	DeVilbiss MBC or JGA
	Air Cap	704 or 765
	Fluid Tip	E

### Brush

Suitable - Small areas only Typically 50-75 microns (2-3 mils) can be achieved

### Roller

Suitable - Small areas only Typically 50-75 microns (2-3 mils) can be achieved

### Thinner

International GTA220 Do not thin more than allowed by local environmental legislation.

### Cleaner

International GTA822

### 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 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

This product will not cure adequately below 5°C (41°F). For maximum performance ambient curing temperatures should be above 10°C (50°F).

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

In common with all epoxies Intergard 400 will chalk and discolour on exterior exposure. However, these phenomena are not detrimental to anti-corrosive performance. The actual rate of chalking will depend on climatic conditions and will normally be limited to a thin surface layer.

Products with high micaceous iron oxide levels tend to produce films which are relatively dark colours, consequently with some colours of thin film finishes two coats may be needed to give good coverage, especially with brush and roller application.

This product is frequently used as a 'travel coat' prior to final overcoating on site. To ensure best extended overcoating properties ensure over-application does not occur and that the surface is fully cleaned of any contamination which may be present in the surface texture due to the coarse nature of the micaceous iron oxide pigmentation.

Aged overcoating is achieved due to the physical roughness imported to the surface by the micaceous iron oxide. Over-application of Intergard 400 can result in a glossy resin rich surface layer which may require abrasion before satisfactory adhesion and overcoating can be achieved.

Absolute measured adhesion of topcoats to aged Intergard 400 is less than that to fresh material, however, it is adequate for the specified end use.

When used in a marine environment, the schemes and overcoating intervals utilised may differ.

## Systems Compatibility

The following primers are recommended for Intergard 400:

Intercure 200	Interplate 240
Intercure 202	Interzinc 12 (mist or tie coat recommended)
Intergard 251	Interzinc 22 (mist or tie coat recommended)
Intergard 269	Interzinc 42
Interplate 11	Interzinc 52
Interplate 170	Interzinc 72
Interplate 180	Interzinc 315

Suitable topcoats for Intergard 400 are:

Interfine 629 HS	Intergard 740
Intergard 400	Interseal 670 HS
Intergard 410	Interthane 799
Intergard 475 HS	Interthane 990
Intergard 540	

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 sections of the International Protective Coatings data manual:

- 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 Material Safety Data Sheet and the container(s), and should not be used without reference to the Material Safety Data Sheet (MSDS) which International Protective Coatings has provided to its customers.

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 International Protective Coatings for further advice.

<b>Pack Size</b>	20 litre unit	Intergard 400 Base	17 litres in a 20 litre container
		Intergard 400 Curing Agent	3 litres in a 5 litre container
	For availability of other pack sizes contact International Protective Coatings		
<b>Shipping Weight</b>	U.N. Shipping No. 1263		
	20 litre unit	32.8 kg (72.2 lb) Base (Part A)	3.3 kg (7.3 lb) Curing Agent (Part B)
<b>Storage</b>	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.	

## Disclaimer

*The information given in this sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. Any warranty, if given, or specific Terms & Conditions of Sale are contained in International's Terms & Conditions of Sale, a copy of which can be obtained on request. Whilst we endeavour to ensure that all advice we give about the product (whether in this sheet or otherwise) is correct we have no control over either the quality or 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 whatsoever or howsoever arising for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of the use of the product. The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.*

*It is the user's responsibility to check that this sheet is current prior to using the product. Issue date: 01/11/2001*

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## International Protective Coatings

World Centre	Asia Region	Australasia Region	Europe Region	Middle East Region	North America Region	South America Region
P.O Box 20980 Oriol House 16 Connaught Place London, W2 2ZB England	3 Neythal Road Jurong Town Singapore 628570	115 Hyde Road Yeronga Brisbane Queensland Australia	P.O Box 20980 Oriol House 16 Connaught Place London, W2 2ZB England	PO Box 37 Dammam 31411 Saudi Arabia	6001 Antoine Drive Houston Texas 77091	Av Paiva 999, Neves, Sao Gonçalo, Rio de Janeiro Brazil
Tel: (44) 20 7479 6000 Fax: (44) 20 7479 6500	Tel: (65) 663 3066 Fax: (65) 266 5287	Tel: (61) 7 3892 8888 Fax: (61) 7 3892 4287 H&S (61) 1800 807 001	Tel: (44) 20 7479 6000 Fax: (44) 20 7479 6500	Tel: (966) 3 812 1044 Fax: (966) 3 812 1169	Tel: (1) 713 682 1711 Fax: (1) 713 684 1514	Tel: (55) 21 624 7100 Fax: (55) 21 624 7123

### Local Office:

Tel: 0191 469 6111 Fax: 0191 495 0676