

Intergard 355

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Product Description

A high build, high solids, 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.

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

Practical Information for Intergard 355

Colour	Silver and Natural Grey																														
Gloss Level	Matt																														
Volume Solids	80%																														
Typical Thickness	125 microns (5 mils) dry equivalent to 156 microns (6.2 mils) wet																														
Theoretical Coverage	6.4 m ² /litre at 125 microns d.f.t and stated volume solids 257 sq.ft/US gallon at 5 mils d.f.t and stated volume solids																														
Practical Coverage	Allow appropriate loss factors																														
Method of Application	Airless spray, Air spray, Brush, Roller																														
Drying Time	<table> <tr> <th rowspan="2">Temperature</th><th rowspan="2">Touch Dry</th><th rowspan="2">Hard Dry</th><th colspan="2">Overcoating Interval recommended topcoats</th></tr> <tr> <th><i>Minimum</i></th><th><i>Maximum</i></th></tr> <tr> <td>10°C (50°F)</td><td>16 hours</td><td>72 hours</td><td>72 hours</td><td>Extended*</td></tr> <tr> <td>15°C (59°F)</td><td>12 hours</td><td>48 hours</td><td>48 hours</td><td>Extended*</td></tr> <tr> <td>25°C (77°F)</td><td>6 hours</td><td>24 hours</td><td>24 hours</td><td>Extended*</td></tr> <tr> <td>40°C (104°F)</td><td>3 hours</td><td>12 hours</td><td>12 hours</td><td>Extended*</td></tr> </table>				Temperature	Touch Dry	Hard Dry	Overcoating Interval recommended topcoats		<i>Minimum</i>	<i>Maximum</i>	10°C (50°F)	16 hours	72 hours	72 hours	Extended*	15°C (59°F)	12 hours	48 hours	48 hours	Extended*	25°C (77°F)	6 hours	24 hours	24 hours	Extended*	40°C (104°F)	3 hours	12 hours	12 hours	Extended*
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* See International Protective Coatings Definitions and Abbreviations

Regulatory Data

Flash Point	Base (Part A) 23°C (73°F)	C/A (Part B) 23°C (73°F)	Mixed 23°C (73°F)
Product Weight	1.96 kg/l (16.35 lb/gal)		
VOC	236 g/l (1.97 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 355, 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.

Intergard 355 is suitable for application to blast cleaned surfaces which were initially to the above standard but have been allowed to deteriorate under good shop conditions for up to 7-10 days. The surface may deteriorate to Sa2 standard but must be free from loose powdery deposits.

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 355. 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	6.4 parts : 1.0 part by volume			
Working Pot Life	10°C (50°F) 8 hours	15°C (59°F) 6 hours	25°C (77°F) 4 hours	40°C (104°F) 1½ hours
Airless Spray	Recommended	- Tip range 0.53-0.65 mm (21-26 thou) - Total output fluid pressure at spray tip not less than 197 kg/cm² (2,800 p.s.i.)		
Air Spray (Pressure Pot)	Recommended	Gun Air Cap Fluid Tip	DeVilbiss MBC or JGA 704 or 765 E	
Brush	Suitable - Small areas only.	Typically 75-100 microns (3-4 mils) can be achieved		
Roller	Suitable - Small areas only.	Typically 75-100 microns (3-4 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).

In common with all epoxies Intergard 355 will chalk on exterior exposure, although in this case to a reduced amount due to the protective nature of micaceous iron oxide. The actual rate of chalking will depend on climatic conditions and, except in hot countries, will be limited to a thin surface layer. Chalking is only likely to reduce anti-corrosive properties when the chalked film can be removed, for example, by exposure to high UV together with intermittent exposure to fast moving water.

As with all products with high micaceous iron oxide levels only relatively dark colours can be formulated, consequently with some colours of thin film finishes two coats may be needed to give good coverage.

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 355 can result in a glossy resin rich surface layer which may require abrasion before satisfactory adhesion and overcoating can be achieved.

To ensure good aged overcoating of Intergard 355 by other materials the surface must be clean, dry and free from contamination, particularly if the surface profile is rough due to the presence of micaceous iron oxide.

Absolute measured adhesion of topcoats to aged Intergard 355 is less than that to fresh material, however, it is adequate for the specified end use.

Systems Compatibility

Intergard 355 can be applied over an extremely wide range of priming systems which include:-

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

Other primers are available. Contact International Protective Coatings for information.

Suitable topcoats for Intergard 355 are:-

Interfine 629 HS	Intergard 670 HS
Intergard 355	Intergard 740
Intergard 410	Interthane 799
Intergard 475 HS	Interthane 990
Intergard 540	

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 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.

Pack Size	20 litre unit	Intergard 355 Base Intergard 355 Curing Agent	17.3 litres in a 20 litre container 2.7 litres in a 5 litre container
Shipping Weight	For availability of other pack sizes contact International Protective Coatings		
	U.N. Shipping No. 1263		
	20 litre unit	29.3 kg (64.6 lb) Base (Part A)	3.0 kg (6.7 lb) Curing Agent (Part B)
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.	

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: 1st June 1998

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