

Epoxy

PRODUCT DESCRIPTION

A two component, low VOC, high solids, fast curing epoxy primer for increased productivity pigmented with zinc phosphate to provide added anti-corrosive performance.

INTENDED USES

Specifically designed for use as an anti-corrosive epoxy primer in combination with the International 3200 product series, and other approved topcoats, for the protection of construction heavy machinery, agricultural equipment, railcars, transportation vehicles, material handling and lifting equipment, pumps, valves, gear units and other small motors and machinery.

The main features of Intergard 3210 are:

- Suitable for manual mix or plural component application equipment
- Good adhesion properties over correctly prepared steel, galvanised steel, stainless steel and aluminium substrates
- Lead chromate free
- Smooth finish to contribute to overall aesthetics
- Fast drying, handling and overcoating properties to increase productivity and efficiency

PRACTICAL INFORMATION FOR INTERGARD 3210

Colour	Colours available on request																												
Gloss Level	20-30 gloss units at 60° angle																												
Volume Solids	65% ± 2%																												
Typical Thickness	40-80 microns (1.6-3.2 mils) dry equivalent to 62-123 microns (2.5-4.9 mils) wet																												
Theoretical Coverage	13 m ² /litre at 50 microns d.f.t and stated volume solids 521 sq.ft/US gallon at 2 mils d.f.t and stated volume solids																												
Practical Coverage	Allow appropriate loss factors																												
Method of Application	Airless Spray, Air Assisted Airless Spray, Air spray, Brush, Plural Component Airless Spray, Roller																												
Drying Time	Overcoating Interval with recommended topcoats <table> <tr> <th>Temperature</th><th>Touch Dry</th><th>Hard Dry</th><th>Minimum</th><th>Maximum</th></tr> <tr> <td>10°C (50°F)</td><td>35 minutes</td><td>3.5 hours</td><td>3.5 hours</td><td>2 weeks</td></tr> <tr> <td>25°C (77°F)</td><td>20 minutes</td><td>2 hours</td><td>2 hours</td><td>2 weeks</td></tr> <tr> <td>40°C (104°F)</td><td>10 minutes</td><td>30 minutes</td><td>30 minutes</td><td>2 weeks</td></tr> <tr> <td>60°C (140°F)</td><td>6 minutes</td><td>20 minutes</td><td>20 minutes</td><td>2 weeks</td></tr> </table>				Temperature	Touch Dry	Hard Dry	Minimum	Maximum	10°C (50°F)	35 minutes	3.5 hours	3.5 hours	2 weeks	25°C (77°F)	20 minutes	2 hours	2 hours	2 weeks	40°C (104°F)	10 minutes	30 minutes	30 minutes	2 weeks	60°C (140°F)	6 minutes	20 minutes	20 minutes	2 weeks
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REGULATORY DATA

Flash Point (Typical)	Part A 27°C (81°F); Part B 28°C (82°F); Mixed 27°C (81°F)		
Product Weight	1.5 kg/l (12.5 lb/gal)		
VOC	219 g/kg	EU Solvent Emissions Directive (Council Directive 1999/13/EC)	
See Product Characteristics section for further details			

Protective Coatings

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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.

Suitable for use over phosphate washed steel.

Steel

Abrasive blast clean to Sa2½ (ISO 8501-1:2007) or SSPC-SP6. If oxidation has occurred between blasting and application of Intergard 3210, 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.

A surface profile of 40-75 microns (1.6-3.0 mils) is recommended. Lower surface profiles of 20-30 microns (0.8-1.2 mils) can be used to improve the overall aesthetics of the overall paint system.

Stainless Steel, Galvanised and Aluminium

Remove dirt and oils by solvent cleaning or other suitable detergent/cleaner followed by a thorough water rinsing. Sand or sweep blast to a standard similar to SSPC-SP7 or ISO 8501-1:2007 Sa1 to create a surface profile.

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	10°C (50°F) 6 hours	25°C (77°F) 3 hours	40°C (104°F) 2 hours
Plural Component	Recommended		
Airless Spray	Recommended		
Airless Spray	Tip Range 0.33-0.48 mm (13-19 thou) Total output fluid pressure at spray tip not less than 176 kg/cm² (2503 p.s.i.) For air-assisted airless spray, use suitable proprietary equipment. Electrostatic spray application will require an appropriate trial.		
Air Spray (Pressure Pot)	Recommended	Gun Air Cap Fluid Tip	DeVilbiss MBC or JGA 704 or 765 E
Brush	Small areas only	Typically 50-75 microns (2.0-3.0 mils) can be achieved	
Roller	Small areas only	Typically 50-75 microns (2.0-3.0 mils) can be achieved	
Thinner	International GTA220 (or GTA415)	Do not thin more than allowed by local environmental legislation	
Cleaner	International GTA220 (or GTA415)		
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 GTA220. 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

Intergard 3210 is part of the International 3200 product series and is specifically designed for use where automated paint application and forced curing processes are in operation.

To ensure the correct use of International 3200 product series, it is recommended that the guidance in section 6.4 of ISO 12944 Part 5 (2007) is followed. Contact International Protective Coatings for further advice.

Intergard 3210 is designed to provide very rapid overcoating and quick handling time when force cured at temperatures at or above 40°C (104°F).

The minimum overcoating time is recommended as the hard dry time of the film at the quoted temperature. Please consult International Protective Coatings for wet-on-wet application recommendations.

Over-application should be avoided as thick films will not be as good a substrate for topcoat adhesion after ageing as those at the specified thicknesses.

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

The gloss levels quoted are typical values achieved with this product. This is subject to application method, dry film thickness and environmental conditions within a controlled OEM painting facility. It is always recommended that appropriate product application trials are carried out to ensure satisfactory levels are achieved.

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.

In common with all epoxies Intergard 3210 will chalk and discolour on exterior exposure. However, these phenomena are not detrimental to anti-corrosive performance.

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.

SYSTEMS COMPATIBILITY

Intergard 3210 is designed for application to correctly prepared steel, galvanised steel, stainless steel and aluminium substrates. If necessary, application over prefabrication blast primers can be performed. Consult International Protective Coatings for further details.

Recommended topcoats are:

Interlac 3220HG
Interlac 3220SG
Interthane 3230G
Interthane 3230HG
Interthane 3230M
Interthane 3230SG

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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:

- 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	Unit Size	Part A		Part B	
		Vol	Pack	Vol	Pack
	20 litre	15 litre	20 litre	5 litre	5 litre
For availability of other pack sizes, contact International Protective Coatings.					
SHIPPING WEIGHT (TYPICAL)	Unit Size	Part A		Part B	
	20 litre	26.9 kg		5.3 kg	
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 or 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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