Intergard® 1735

Water Borne Epoxy

PRODUCT DESCRIPTION

A high performance, low VOC, water borne two component epoxy with a high gloss finish.

INTENDED USES

A tough, hard wearing chemically resistant epoxy finish suitable for most circumstances where the odour or emissions from solvent based coatings are unacceptable.

For use on structural steel and equipment in a range of aggressive environments including those found in chemical and petrochemical plants, pulp and paper mills and power stations in both new construction and industrial maintenance situations, under controlled conditions.

Suitable for application to correctly prepared concrete floors and walkways.

PRACTICAL INFORMATION FOR INTERGARD 1735

Colour	Wide range via the Chromascan system
Gloss Level	High Gloss
Volume Solids	50% ± 3% (depends on colour)
Typical Thickness	50-75 microns (2-3 mils) dry equivalent to 100-150 microns (4-6 mils) wet
Theoretical Coverage	10 m²/litre at 50 microns d.f.t and stated volume solids 401 sq.ft/US gallon at 2 mils d.f.t and stated volume solids
Practical Coverage	Allow appropriate loss factors
Method of Application	Air Spray, Airless Spray, Brush, Roller

Drying Time

			Overcoating interval with self	
Temperature	**Touch Dry**	**Hard Dry**	*Minimum*	*Maximum*
10°C (50°F)	3 hours	30 hours	30 hours	Extended[1]
15°C (59°F)	2 hours	22 hours	22 hours	Extended[1]
25°C (77°F)	1 hour	12 hours	12 hours	Extended[1]
40°C (104°F)	30 minutes	5 hours	5 hours	Extended[1]

[1] See International Protective Coatings Definitions and Abbreviations

REGULATORY DATA

Flash Point (Typical)	Part A >101°C (214°F); Part B >101°C (214°F); Mixed >101°C (214°F)	
Product Weight	1.21 kg/l (10.1 lb/gal)	
VOC	66 g/kg	EU Solvent Emissions Directive (Council Directive 2010/75/EU)

See Product Characteristics section for further details

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.

Strict adherence to all cleanliness standards is essential for application of water based coatings.

Primed Surfaces

Intergard 1735 should always be applied over a recommended anti-corrosive coating scheme. The primer surface should be dry and free from all contamination and Intergard 1735 must be applied within the overcoating intervals specified (consult the relevant product data sheet).

Areas of breakdown, damage etc., should be prepared to the specified standard (e.g. Sa2½ (ISO 8501-1:2007) or SSPC-SP6, Abrasive Blasting, or SSPC-SP11, Power Tool Cleaning) and patch primed prior to the application of Intergard 1735.

Plaster, Cement Render, Concrete etc.

Concrete should be cured for a minimum of 28 days prior to coating. The moisture content of the concrete should be below 6%. All surfaces should be clean, dry and free from curing compounds, release agents, trowelling compounds, surface hardeners, efflorescence, grease, oil, dirt, old coatings and loose or disintegrating concrete. All poured and precast concrete must also be sweep blasted (preferred) or acid etched to remove laitence.

Surface should be clean, dry and free from contamination. Remove old, loose or flaking paint. Fill and sand minor defects.
Damp patches, oil staining, bitumen bleed, nicotine deposits, efflorescence and rust discolouration must either be treated at source, or better, the cause of such stains/defects removed. Existing mould, algae and other growth must be killed before commencing work. Domestic strength bleach diluted 1:4 with water or a proprietary fungicide solution should be used. Two treatments may be necessary, after which the area must be washed down and scrubbed to remove residues. Ideally, to prevent future infestations the conditions which support growth should be identified and cure sought.

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

4 part(s) : 1 part(s) by volume

Working Pot Life

10°C (50°F)	15°C (59°F)	25°C (77°F)	40°C (104°F)
1 hour	1 hour	2 hours	2 hours

Airless Spray	Recommended	Tip Range 0.38-0.53 mm (15-21 thou) Total output fluid pressure at spray tip not less than 141 kg/cm² (2005 p.s.i.)	
Air Spray (Pressure Pot)	Recommended	Gun Air Cap Fluid Tip	DeVilbiss MBC or JGA 704 or 765 E
Brush	Recommended	Typically 50 microns (2.0 mils) can be achieved	
Roller	Recommended	Typically 50 microns (2.0 mils) can be achieved	
Thinner	International GTA991 (or clean water)	Do not thin more than allowed by local environmental legislation	

Cleaner

International GTA991 (or clean water)

Work Stoppages

Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with clean water followed by International GTA991. 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 clean water followed by International GTA991. It is good working practice to periodically flush out spray equipment during the course of the working day. Frequency should depend upon amount sprayed, temperature and elapsed time, including any delays.

All surplus material and empty containers should be disposed of in accordance with appropriate regional regulations/legislation.

PRODUCT CHARACTERISTICS

Apply by air or airless spray. Thoroughly flush equipment with International GTA991 thinner, or alcohol, followed by water prior to use. To obtain maximum edge protection and film build, airless or air spray application is recommended. Application by other methods, e.g. brush or roller, may require more than one coat.

As with all water borne coatings careful control of application conditions is required to ensure good performance.

The following basic parameters must be adhered to:

Intergard 1735 must be protected from freezing at all times during storage.

The minimum steel temperature for application must be above 10°C (50°F), and be at least 3°C (5°F) above dew point.

The relative humidity should be lower than 70% otherwise drying and overcoating times will be severely extended.

Good airflow is essential around the object being painted [minimum air speed 0.1m/sec (4 inches/sec)].

Minor areas which are difficult to ventilate should be brush applied to prevent over-application.

Application below the minimum film forming temperature (M.F.F.T.) of the coating and/or poor ventilation will result in poor film coalescence and a powdery cracked film which will require removal and re-application.

With Intergard 1735, no increase in viscosity is observed after mixing, even after long periods. However, if the stated pot lives are exceeded then the film formed on curing will have inferior properties and will not give the specified level of performance. Unlike solvent based epoxies, the pot life of Intergard 1735 is shorter at low temperatures.

For application to plaster, cement render, concrete, blockwork etc., it is recommended that Intergard 1735 is thinned by 10-20% for use as a primer / sealer coat. One or two coats should be applied to provide good penetration and sealing of the substrate prior to application of a further full coat of Intergard 1735.

Intergard 1735 is not suitable as a primer for systems designed for permanent water immersion.

In common with all epoxies Intergard 1735 will chalk and discolour on exterior exposure. However, these phenomena are not detrimental to anti-corrosive performance.

Intergard 1735 is capable of application to sound alkyd and to single pack water based systems to allow upgrading for chemical and wear resistance.

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

The following primers are recommended for Intergard 1735:

Water borne

InterH2O 280
InterH2O 401

Solvent borne

Intercure 200
Intercure 420
Intergard 251
Intergard 269
Intergard 475HS
Interseal 670HS
Interzinc 42
Interzinc 52
Interzinc 315

For other suitable primers, consult International Protective Coatings.

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 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 International Protective Coatings for further advice.

PACK SIZE

Unit Size	Part A		Part B	
	Vol	Pack	Vol	Pack
5 litre	4 litre	5 litre	1 litre	1 litre
5 US gal	4 US gal	5 US gal	1 US gal	1 US gal

For availability of other pack sizes, contact International Protective Coatings.

SHIPPING WEIGHT (TYPICAL)

Unit Size	Part A	Part B
5 US gal	45.2 lb	9.5 lb
5 litre	5.5 kg	1.2 kg

U.N. Shipping No. Non Hazardous

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. Protect from freezing at all times during storage.

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.

Copyright © AkzoNobel, 18/09/2018.

All trademarks mentioned in this publication are owned by, or licensed to, the AkzoNobel group of companies.

www.international-pc.com