

Epoxy

PRODUCT DESCRIPTION

A two component solvent free epoxy filler, which is easily mixed and applied by knife or trowel.

INTENDED USES

As a filler for correctly prepared, corroded and pitted steel prior to coating maintenance.

Recommended for application to surrounding area of impressed current anodes to resist voltage and attack by alkali.

PRACTICAL INFORMATION FOR INTERGARD 821

Colour	Grey
Gloss Level	Matt
Volume Solids	100%
Typical Thickness	20000 microns (800 mils) dry equivalent to 20000 microns (800 mils) wet
Theoretical Coverage	0.05 m ² /litre at 20,000 microns d.f.t. and stated volume solids 2 sq.ft./US gallon at 800 mils d.f.t. and stated volume solids
Practical Coverage	Allow appropriate loss factors
Method of Application	Trowel, Knife

Drying Time

Temperature	Touch Dry	Hard Dry	Overcoating Interval with recommended topcoats	
			Minimum	Maximum
10°C (50°F)	9 hours	42 hours	42 hours	5 days
15°C (59°F)	8 hours	36 hours	36 hours	4 days
25°C (77°F)	6 hours	24 hours	24 hours	2 days
40°C (104°F)	90 minutes	11 hours	11 hours	1 day

REGULATORY DATA

Flash Point (Typical) Part A 65°C (149°F); Part B 62°C (144°F); Mixed 62°C (144°F)

Product Weight 0.70 kg/l (5.8 lb/gal)

VOC 0.61 lb/gal (74 g/lt) EPA Method 24

126 g/kg EU Solvent Emissions Directive (Council Directive 1999/13/EC)

See Product Characteristics section for further details

Protective Coatings

Epoxy

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.

Abrasive Blast Cleaning

For immersion service, Intergard 821 must be applied to surfaces blast cleaned to Sa2½ (ISO 8501-1:2007) or SSPC-SP10. However, for atmospheric exposure Intergard 821 may be applied to surfaces prepared to a minimum of Sa2½ (ISO 8501-1:2007) or SSPC-SP6.

Surface defects revealed by the blast cleaning process should be ground, filled, or treated in the appropriate manner.

A surface profile of 75 microns (3 mils) is recommended.

Primed Steelwork

Intergard 821 can be applied over approved anti-corrosive primers. The primer surface should be dry and free from all contamination and Intergard 821 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-SP10 Abrasive Blasting, or SSPC-SP11, Power Tool Cleaning) and patch primed prior to the application of Intergard 821

Pitted Areas

Blast out to near white metal Sa2½ (ISO 8501-1:2007) or SSPC-SP6. If cleaning can not be carried out effectively by blasting, mechanically grind out the pits using a suitable carborundum head. Apply appropriate primer before oxidation occurs. Apply the Intergard 821 within the overcoating interval specified for the primer. Ensure the area is clean and dry prior to application.

Anode Shield Areas

New Building and Major Refurbishment: Where necessary, remove weld spatter and smooth weld seams and sharp edges. Blast clean to near white metal Sa2½ (ISO 8501-1:2007) or SSPC-SP10.

Repair: Prepare bare areas of steel by blasting to near white metal Sa2½ (ISO 8501-1:2007) or SSPC-SP10. Feather or chip back surrounding areas to a sound edge. Roughen the exposed edge of the existing Intergard 821 to provide a mechanical key. Overlap the Intergard 821 onto this abraded area.

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. Mixing should be carried out on a large, clean, smooth sheet of steel, tinsplate or hardboard, using palette knives, scraper blades or trowels. DO NOT ADD WATER OR THINNERS TO THE MIX. Thoroughly mix the base (Part A) with curing agent (Part B) in the correct proportions with a knife or trowel.			
Mix Ratio	1 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)
	3 hours	2 hours	1 hour	15 minutes
Airless Spray	Not suitable			
Air Spray (Pressure Pot)	Not suitable			
Trowel	Recommended	APPLY BY TROWEL OR KNIFE ONLY		
Thinner	Not suitable	DO NOT THIN		
Cleaner	International GTA822			
Work Stoppages	Do not allow material to remain on the used knife or trowel. Thoroughly wash all equipment with GTA822. Once units of paint have been mixed they should NOT be re-sealed and it is advised after prolonged stoppages that work recommences with freshly mixed units.			
Clean Up	Clean all equipment immediately after use with International GTA822. Frequency of cleaning will depend upon amount trowelled, temperature and elapsed time, including any delays.			
	All surplus materials and empty containers should be disposed of in accordance with appropriate regional regulations/legislation.			

Epoxy

PRODUCT CHARACTERISTICS

Intergard 821 is a specialist product designed for a range of specified end uses. Detailed application instructions can be obtained from International Protective Coatings.

Application of Intergard 821 is normally performed using a trowel, pallette knife or putty knife. Applicators should wear rubber nitrile gloves and appropriate skin protection.

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.

Exposure to unacceptably low temperatures and/or high humidities during or immediately after application may result in incomplete cure and surface contamination that could jeopardise subsequent intercoat adhesion.

In humid conditions, the surface may develop a 'sweat' which must be washed off with fresh water before overcoating.

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

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.

SYSTEMS COMPATIBILITY

The following primers are recommended for Intergard 821:

Intergard 269
Interline 982

The following topcoats are recommended for Intergard 821:

Intergard 400
Interline 925
Interline 944
Interseal 670HS
Interzone 954
Interzone 1000

For other suitable primers/topcoats, consult International Protective Coatings.

Epoxy

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.

Warning: This product contains liquid epoxies and modified polyamines and may cause skin sensitisation if not used correctly.

PACK SIZE	Unit Size	Part A		Part B	
		Vol	Pack	Vol	Pack
	5 litre	2.5 litre	3 litre	2.5 litre	3 litre
For availability of other pack sizes, contact International Protective Coatings.					
SHIPPING WEIGHT (TYPICAL)	Unit Size	Part A		Part B	
		Vol	Pack	Vol	Pack
	5 litre	2.3 kg		1.9 kg	
STORAGE	Shelf Life	24 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.

Copyright © AkzoNobel, 05/02/2015.

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

www.international-pc.com