

Epoxy

PRODUCT DESCRIPTION

A two component, HAPs free, low VOC, high solids, fast curing epoxy primer/finish.

INTENDED USES

Suitable for use as a one or two coat primer/finish coating or as an intermediate over recommended anti-corrosive primers.

Intergard 3450 provides a combination of anti-corrosive barrier protection and chemical fume and spillage resistance, along with good abrasion resistance. Ideal for use in moderately corrosive environments and where fast drying/rapid recoating is desired.

PRACTICAL INFORMATION FOR INTERGARD 3450

| | | | | |
|------------------------------|--|-----------------|----------------|-----------------------|
| Colour | White, Special colours upon request. | | | |
| Gloss Level | Semi-gloss | | | |
| Volume Solids | 74% ± 2% | | | |
| Typical Thickness | 100-150 microns (4-6 mils) dry equivalent to 135-203 microns (5.4-8.1 mils) wet | | | |
| Theoretical Coverage | 5.90 m ² /litre at 125 microns d.f.t and stated volume solids 237 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, Plural Component Airless Spray, Conventional Spray, Brush, Roller | | | |
| Drying Time | Overcoating Interval with recommended topcoats | | | |
| Temperature | Touch Dry | Hard Dry | <i>Minimum</i> | <i>Maximum</i> |
| 10°C (50°F) | 90 minutes | 7 hours | 7 hours | Extended ¹ |
| 15°C (59°F) | 75 minutes | 5 hours | 5 hours | Extended ¹ |
| 25°C (77°F) | 60 minutes | 2.5 hours | 2.5 hours | Extended ¹ |
| 40°C (104°F) | 30 minutes | 60 minutes | 60 minutes | Extended ¹ |

¹ See International Protective Coatings Definitions and Abbreviations

REGULATORY DATA

| | | | |
|------------------------------|--|---------------|--|
| Flash Point (Typical) | Part A 33°C (91°F); Part B 43°C (109°F); Mixed 34°C (93°F) | | |
| Product Weight | 1.62 kg/l (13.5 lb/gal) | | |
| VOC | 1.90 lb/gal (228 g/l) | EPA Method 24 | |

See Product Characteristics section for further details

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SURFACE PREPARATION

All surfaces to be coated should be clean, dry and free from contamination. Prior to paint application, all steel 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

Abrasive blast clean to Sa2½ (ISO 8501-1:2007) or SSPC-SP6. Immediately prior to coating application, the surface shall comply with the specified degree of cleaning.

A sharp, angular profile of 25-50 microns maximum (1-2 mils maximum) is recommended.

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

Primed Surfaces

Weld seams and damaged areas should be blast cleaned to Sa2½ (ISO 8501-1:2007) or SSPC-SP6. If the shop primer shows extensive or widely scattered breakdown overall sweep blasting may be necessary.

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) |
| | 3 hours | 2 hours | 60 minutes | 45 minutes |
| Plural Component | Suitable | | | |
| Airless Spray | Recommended | | | |
| Air Spray (Conventional) | Suitable | | | |
| Brush | Suitable - Touch up and small areas only | Typically 75-100 microns (3.0-4.0 mils) can be achieved | | |
| Roller | Suitable - Touch up and small areas only | Typically 75-100 microns (3.0-4.0 mils) can be achieved | | |
| Thinner | International GTA723 | Do not thin more than allowed by local environmental legislation | | |
| Cleaner | International GTA415 (or GTA220) | | | |
| Work Stoppages | Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with International GTA415. 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 GTA415. | | | |

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.

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PRODUCT CHARACTERISTICS

Maximum film build in one coat is best attained by airless spray. When applying by methods other than airless spray, the required film build is unlikely to be achieved. Application by air spray may require a multiple cross spray pattern to attain maximum film build. Low or high temperatures may require specific application techniques to achieve maximum film build.

When applying Intergard 3450 by brush or roller, it may be necessary to apply multiple coats to achieve the total specified system dry film thickness.

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

When applying Intergard 3450 in confined spaces ensure adequate ventilation.

In moderately corrosive environments, it is recommended that a minimum of 100 microns (4 mils) dry film thickness should be specified to ensure adequate anti-corrosive performance. However, in non-aggressive, low corrosive environments such as those equating to C2 as per ISO 12944 part 2, it is acceptable to specify Intergard 3450 as a single coat at 80 microns (3.2 mils) dry film thickness.

Condensation occurring during or immediately after application may result in a matt finish and an inferior film. Exposure to dew or rain prior to specified hard dry time may cause a deterioration in surface appearance which may in turn impair overall performance. This phenomenon is particularly prominent in darker shades.

In common with all epoxies Intergard 3450 will chalk and discolour on exterior exposure. However, these phenomena are not detrimental to anti-corrosive performance.

Where a durable cosmetic finish with good gloss and colour retention is required overcoat with recommended topcoats.

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 3450 is normally applied directly to blast cleaned steel, however, it can also be applied over other epoxy primers.

Interzinc 52

The following topcoats are recommended:

Interthane 990UHS

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 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 |
| | 200 US gal | 200 US gal | 275 US gal | 50 US gal | 55 US gal |
| For availability of other pack sizes, contact International Protective Coatings. | | | | | |
| SHIPPING WEIGHT (TYPICAL) | Unit Size | Part A | | Part B | |
| | | 2787 lb | | 470.8 lb | |
| STORAGE | Shelf Life | 18 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.

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