

Intergard 410

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Product Description

A high build, high performance, two component epoxy intermediate or finish with excellent chemical and abrasion resistance.

Intended Uses

Suitable for use as part of a high performance coating system to provide an anti-corrosive barrier in areas where aggressive corrosion conditions prevail.

Intergard 410 can be used either as a coloured intermediate/undercoat for high performance durable finishes or alternatively, can act as a finish coating where a high quality, decorative finish is not required.

Widely used in both new construction and industrial maintenance on offshore structures, chemical plants, power stations and pulp and paper plants.

Practical Information for Intergard 410

| | | | | |
|------------------------------|--|----------|--|----------------|
| Colour | Wide range via the Chromascan system. | | | |
| Gloss Level | Semi Gloss | | | |
| Volume Solids | 60% ± 3% (depends on colour). | | | |
| Typical Thickness | 100-150 microns (4-6 mils) dry equivalent to 167-250 microns (6.7-10.0 mils) wet | | | |
| Theoretical Coverage | 4.80 m ² /litre at 125 microns d.f.t and stated volume solids 192 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 | | | | |
| | | | Overcoating Interval with recommended topcoats | |
| Temperature | Touch Dry | Hard Dry | <i>Minimum</i> | <i>Maximum</i> |
| 10°C (50°F) | 5 hours | 24 hours | 24 hours | 10 days |
| 15°C (59°F) | 4 hours | 20 hours | 20 hours | 7 days |
| 25°C (77°F) | 2 hours | 10 hours | 10 hours | 7 days |
| 40°C (104°F) | 1 hour | 5 hours | 5 hours | 4 days |

Regulatory Data

| | | | |
|-----------------------|---|-----------------------------|----------------------|
| Flash Point | Base (Part A) 30°C (86°F) | C/A (Part B) 29°C (84°F) | Mixed 30°C (86°F) |
| Product Weight | 1.29-1.42 kg/l (10.77-11.85 lb/gal) | | |
| VOC | 403 g/l (3.35 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.

Primed Surfaces

Intergard 410 should always be applied over a recommended anti-corrosive coating scheme. The primer surface should be dry and free from all contamination, and Intergard 410 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 8501-1:1988) or SSPC-SP6, Abrasive Blasting, or SSPC-SP11, Power Tool Cleaning) and patch primed prior to the application of Intergard 410.

Shop Primed Steelwork

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 Steelwork

Ensure that the surface of the primer is clean, dry and free from contamination and zinc salts before application of Intergard 410. 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

4 parts : 1 parts by volume

Working Pot Life

| 10°C (50°F) | 15°C (59°F) | 25°C (77°F) | 40°C (104°F) |
|-------------|-------------|-------------|--------------|
| 8 hours | 6 hours | 4 hours | 2 hours |

Airless Spray

Recommended. - Tip range 0.45-0.58 mm (18-23 thou)
- Total output fluid pressure at spray tip not less than 176 kg/cm² (2,500 p.s.i.)

Air Spray (Pressure Pot)

| | | |
|-------------|-----------|----------------------|
| Recommended | Gun | DeVilbiss MBC or JGA |
| | Air Cap | 704 or 765 |
| | Fluid Tip | E |

Brush

Suitable - Small areas only Typically 50-75 microns (2-3 mils) can be achieved

Roller

Suitable - Small areas only Typically 50-75 microns (2-3 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

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.

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.

When applying Intergard 410 in confined spaces ensure adequate ventilation.

In common with all epoxies Intergard 410 will chalk and discolour on exterior exposure. However, these phenomena are not detrimental to anti-corrosive performance. The actual rate of chalking will depend upon climatic conditions and will normally be limited to a thin surface layer. Chalking is only likely to reduce anti-corrosion properties when the chalked film can be removed, for example, by exposure to high UV together with intermittent exposure to fast moving water.

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

Condensation occurring during or immediately after application may result in a matt finish and an inferior film.

Premature exposure to ponding water will cause a colour change, especially in dark colours.

Intergard 410 is suitable for use as a protective system for concrete floors and walls subjected to light traffic and mild chemical attack.

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. Priming should be undertaken with Intergard 740 or Intergard 410 thinned with International GTA220 thinners at approximately 10-20% by volume.

This product has the following specification approvals:

BS.5493:1977 KU1B, KF1B and KF1D.

Shell Specification DEP 40.48.00.30 Gen. Chapter VI (d)

Systems Compatibility

Intergard 410 can be applied over an extremely wide range of priming systems which include:

| | |
|----------------|--|
| Intercure 200 | Interplate 180 |
| Intercure 202 | Interplate 240 |
| Intercure 420 | Interzinc 12 (mist coat or tie coat recommended) |
| Intercure 422 | Interzinc 22 (mist coat or tie coat recommended) |
| Intergard 251 | Interzinc 42 |
| Intergard 269 | Interzinc 52 |
| Interplate 11 | Interzinc 72 |
| Interplate 170 | Interzinc 315 |

Suitable topcoats for Intergard 410 are:

Interfine 629 HS
Intergard 410
Intergard 740
Interthane 990

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 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 410 Base | 16 litres in a 20 litre container |
| | | Intergard 410 Curing Agent | 4 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 | 24.2 kg (53.4 lb) Base (Part A) | 4.2 kg (9.3 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 September 1997

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International Protective Coatings

Worldwide Availability

| World Centre | Asia Region | Australasia Region | Europe Region | Middle East Region | North America Region | South America Region |
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