Interchar® 212
Epoxy Intumescent Coating

Product Description
A high performance, high build, solvent free, two pack modified epoxy intumescent fireproofing coating designed to be used on steelwork requiring protection from cellulosic fires.

Independently fire tested. Approved to BS 476 part 20-22, and GOST (Russia)
Undergoing approvals to UL 263 (exterior listed).

Applied off site by specialist applicators Interchar 212 will achieve the required protection (e.g. 2 hours) in only one or two coats. The product has excellent corrosion performance and mechanical properties. Unlike many other products on the market Interchar 212 can provide fully fire proofed steelwork without the need to topcoat.

Interchar 212 is a spray applied material, and performs without the requirement for any reinforcement.

Intended Uses
To assist in preserving the structural integrity of steelwork in a cellulosic fire. Typical structures requiring this protection include a number of public access buildings e.g. Airport Terminals, Leisure Facilities, Convention Centres, Educational Facilities, Shopping Malls, Industrial Complexes, and Hotels.

Interchar 212 utilizes tough durable epoxy technology to provide a material that allows for steelwork to be fabricated and fire protected away from the construction site which helps in both improving quality control and reducing construction schedules.

Color
Medium Gray
Gloss Level
Matte Textured Finish
Volume Solids
100%
Typical Thickness
2 mm - 8 mm (Dependent on protection required). Typical thickness per coat 3.5 mm
Theoretical Coverage
1 kg of Interchar 212 will provide 1 mm of fire protection to 1 m² **
Practical Coverage
Allow appropriate loss factors
Method of Application
Hot twin feed airless spray (Plural Component) or modified single component machine

** based on plural component application

Drying Time

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Touch Dry#</th>
<th>Hard Dry#</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>50°F (10°C)</td>
<td>16 hours</td>
<td>24 hours</td>
<td>24 hours</td>
<td>Extended*</td>
</tr>
<tr>
<td>59°F (15°C)</td>
<td>8 hours</td>
<td>16 hours</td>
<td>24 hours</td>
<td>Extended*</td>
</tr>
<tr>
<td>77°F (25°C)</td>
<td>5 hours</td>
<td>12 hours</td>
<td>12 hours</td>
<td>Extended*</td>
</tr>
<tr>
<td>104°F (40°C)</td>
<td>2 hours</td>
<td>8 hours</td>
<td>8 hours</td>
<td>Extended*</td>
</tr>
</tbody>
</table>

* See International Protective Coatings Definitions & Abbreviations
# All drying time data has been quoted a typical thickness of 3.5 mm

Regulatory Data

<table>
<thead>
<tr>
<th>Flash Point</th>
<th>Base (Part A)</th>
<th>C/A (Part B)</th>
<th>Mixed (Part C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;223°F (106°C)</td>
<td>&gt;223°F (106°C)</td>
<td>&gt;223°F (106°C)</td>
<td></td>
</tr>
</tbody>
</table>

Applied Density (plural component)
62.4 lbs/ft³ (1.0 kg/l)

VOC
0 lb/gal (0 g/l) (Calculated)
# Interchar® 212

**Epoxy Intumescent Coating**

## 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.

### Abrasive Blast Cleaning

This product must only be applied to surfaces prepared by abrasive blast cleaning to SSPC-SP10 or Sa2½ (ISO 8501-1:1998).

### Primed Surfaces

If applied within 4 hours of blasting in shop, a primer may not be required. Consult with International Paint.

## Application

<table>
<thead>
<tr>
<th>Mixing</th>
<th>If applying Interchar 212 by modified airless spray, pump or trowel, it will first be necessary to thoroughly power mix a kit of Interchar 212. Individual components must have been stored for 24 hours at 73°F (23°C) and fully power agitated before mixing. 70°-80°F (21°-67°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mix Ratio</td>
<td>Always mix full units.</td>
</tr>
<tr>
<td>Working Pot Life</td>
<td>59°F (15°C) 120 minutes</td>
</tr>
<tr>
<td></td>
<td>77°F (25°C) 90 minutes</td>
</tr>
<tr>
<td>Plural Component</td>
<td>Highly Recommended Heated plural equipment approved by International Paint</td>
</tr>
<tr>
<td>Modified Airless Spray</td>
<td>Suitable Higher applied densities may lead to lower transfer efficiencies</td>
</tr>
<tr>
<td>Trowel</td>
<td>Suitable - Small areas only</td>
</tr>
<tr>
<td>Thinner</td>
<td>International GTA123 International GTA822 International GTA853 Only for pre-mix and hand application - consult Working Procedures.</td>
</tr>
<tr>
<td>Cleaner</td>
<td>International GTA822</td>
</tr>
<tr>
<td>Work Stoppages</td>
<td>Do not allow mixed material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with International GTA822.</td>
</tr>
<tr>
<td>Clean Up</td>
<td>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.</td>
</tr>
</tbody>
</table>

All surplus materials and empty containers should be disposed of in accordance with appropriate regional regulations/legislation.
The detailed Recommended Working Procedures for Interchar epoxy coatings must be consulted prior to use. In addition it is mandatory that you make contact with International Paint to ensure that, if required, a training programme can be initiated in the application and use of this material.

International Paint highly recommends the use of plural component equipment for Interchar 212. Other application methods can lead to increased usage rates due to the unique product characteristic and increased wastage associated with other application methods.

Only equipment approved by International Paint shall be used, as detailed in the Working Procedures or by the International Paint Field Service Engineer.

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

When applying Interchar 212 in confined spaces ensure adequate ventilation.

The final surface finish is dependent on application method. Avoid using a mixture of application methods whenever possible.

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

In common with all epoxies Intergard 212 will chalk and discolour on exterior exposure. These phenomena are not detrimental to fire proofing performance. Where a durable cosmetic finish with good gloss and colour retention is required overcoat with recommended topcoats.

Where multicoat systems are being used optimum inter coat adhesion is best achieved by keeping the overcoating interval as short as possible.

Due to the high build nature of this material it may be necessary to roller areas requiring a cosmetic finish.

International Paint can supply field service, however it is the responsibility of the Application Contractor to provide reasonable notice to International Paint of the planned application dates. Where field service is supplied quality control remains the responsibility of the applicator but as a minimum must conform to the procedures laid down by the client and International Paint.

Interchar 212 has been tested as part of a coating system for use in fire situations in combination with a wide range of primers and topcoats.

The following primers are approved for use with Interchar 212:

- Intergard 251
- Intergard 269
- Intercure 200
- Intercure 200HS
- Intercure 324

The following topcoats are approved for use with Interchar 212:

- Interthane 870
- Interthane 990
- Interfine 878
- Interfine 979
**Addition 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
- Interchar epoxy Working Procedures

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 Paint for further advice.

**Pack Size**

- 44.2 lb (20.0 kg) Unit
- 110.3 lb (50.0 kg) Unit

**Shipping Weight**

U.N. Shipping No. Non Hazardous

- 31.33 lbs (14.2 kg)
- 12.78 lbs (5.8 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.

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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. While we endeavor 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 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: 10th January 2005

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International Protective Coatings

**Worldwide Availability**

<table>
<thead>
<tr>
<th>World Centre</th>
<th>Asia Region</th>
<th>Australasia Region</th>
<th>Europe Region</th>
<th>Middle East Region</th>
<th>North America Region</th>
<th>South America Region</th>
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<tbody>
<tr>
<td>P.O Box 20980</td>
<td>3 Nethal Road</td>
<td>111 Hyde Road</td>
<td>P.O Box 29990</td>
<td>PO Box 37</td>
<td>6001 Antoine Drive</td>
<td>Ar Pará 999,</td>
</tr>
<tr>
<td>Oriel House</td>
<td>Jurong Town</td>
<td>Yeronga</td>
<td>Oriel House</td>
<td>Dammam 31411</td>
<td>Houston</td>
<td>Neves, Sao Gonçalo,</td>
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<tr>
<td>16 Connaught Place</td>
<td>Singapore 629570</td>
<td>Brisbane</td>
<td>16 Connaught Place</td>
<td>Saudi Arabia</td>
<td>Texas 77091</td>
<td>Rio de Janeiro</td>
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<tr>
<td>London, W2 2ZB</td>
<td>Queensland</td>
<td>Queensland</td>
<td>London, W2 2ZB</td>
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<td>England</td>
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<td>Australia</td>
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