

# Interchar 404

Intumescent Coating

**PRODUCT DESCRIPTION**

A one component, solvent based, high solids intumescent coating independently tested at accredited laboratories to assess fire protection performance on structural steelwork in accordance with the European Standard EN13881 part 4:2002. Approvals include: NBN713.020 (Belgium) CTICM (France), NEN6072:2001 (The Netherlands) and UNO 23820:1997 (Spain)

**INTENDED USES**

To provide up to 1 hour fire protection on 'T' sections beams, columns and hollow sections.  
 Due to its fast drying properties, and rapid recoatability, Interchar 404 is suitable for application in the steel fabrication shop and can be used over a wide range of approved priming systems.  
 An on-site grade of Interchar 404 is also available.

**PRACTICAL INFORMATION FOR INTERCHAR 404**

<b>Colour</b>	White and Grey																														
<b>Gloss Level</b>	Matt																														
<b>Volume Solids</b>	75% ± 2%																														
<b>Typical Thickness</b>	350-1000 microns (14-40 mils) dry equivalent to 467-1000 microns(18.7-40.0 mils) wet																														
<b>Theoretical Coverage</b>	1.0 m <sup>2</sup> /litre at 750 microns d.f.t. and stated volume solids																														
<b>Practical Coverage</b>	Allow appropriate loss factors																														
<b>Method of Application</b>	Airless spray, Brush																														
<b>Drying Time#</b>	<table border="1"> <thead> <tr> <th rowspan="2">Temperature</th> <th rowspan="2">Touch Dry</th> <th rowspan="2">Hard Dry</th> <th colspan="2">Overcoating Interval Interchar 404 with Self</th> </tr> <tr> <th><i>Minimums</i></th> <th><i>Maximums</i></th> </tr> </thead> <tbody> <tr> <td>10°C (50°F)</td> <td>60 minutes</td> <td>24 hours</td> <td>9 hours</td> <td>Extended*</td> </tr> <tr> <td>15°C (59°F)</td> <td>60 minutes</td> <td>22 hours</td> <td>7 hours</td> <td>Extended*</td> </tr> <tr> <td>25°C (77°F)</td> <td>40 minutes</td> <td>18 hours</td> <td>5 hours</td> <td>Extended*</td> </tr> <tr> <td>40°C (104°F)</td> <td>20 minutes</td> <td>8 hours</td> <td>3 hours</td> <td>Extended*</td> </tr> </tbody> </table>				Temperature	Touch Dry	Hard Dry	Overcoating Interval Interchar 404 with Self		<i>Minimums</i>	<i>Maximums</i>	10°C (50°F)	60 minutes	24 hours	9 hours	Extended*	15°C (59°F)	60 minutes	22 hours	7 hours	Extended*	25°C (77°F)	40 minutes	18 hours	5 hours	Extended*	40°C (104°F)	20 minutes	8 hours	3 hours	Extended*
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# All drying time data has been quoted at the typical thickness of 750 microns (30 mils) d.f.t.

\* See International Protective Coatings Definitions & Abbreviations

§ Sealer coat should be applied as soon as possible after completion of the final coat of Interchar 404 (minimum 2-4 hours for Intersheen 54 and 579; 24 hours for Interthane 870 or Interthane 990). However, d.f.t. must be checked to ensure that specified thickness has been achieved before any sealer coat is applied.

**REGULATORY DATA**

<b>Flash Point</b>	5°C (41°F)
<b>Product Weight</b>	1.37 kg/l (11.4 lb/gal)
<b>VOC</b>	318 g/l (2.50 lb/gal) (calculated)

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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.

Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

## Primed Surfaces

Interchar 404 should always be applied over a recommended anti-corrosive coating scheme. The primer surface should be of normal appearance, dry and free from all contamination, and Interchar 404 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 Interchar 404.

## Zinc Primed Surfaces

Ensure that the surface of the primer is clean, dry and free from contamination and zinc salts before application of Interchar 404. Ensure zinc primers are fully cured before overcoating. The use of a tie coat is recommended. Consult International Protective Coatings.

## APPLICATION

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<b>Mixing</b>	This material is a one component coating and should always be mixed thoroughly with a <b>power agitator</b> before application.	
<b>Mix Ratio</b>	Not applicable	
<b>Working Pot Life</b>	Not applicable	
<b>Airless Spray</b>	Recommended	<ul style="list-style-type: none"><li>- Tip range 0.48-0.59 mm (19-23 thou)</li><li>- Total output fluid pressure at spray tip not less than 246 kg/cm<sup>2</sup> (3,500 p.s.i.)</li><li>- A 9.0 mm (<sup>3</sup>/<sub>8</sub>" ) bore fluid line attached to a 6.5 mm (<sup>1</sup>/<sub>4</sub>" ) bore whip end is recommended</li></ul>
<b>Air Spray (Pressure Pot)</b>	Not recommended	
<b>Brush</b>	Suitable	Typically 250-400 microns (10-16 mils) wet film thickness can be achieved
<b>Roller</b>	Not recommended	
<b>Thinner</b>	Not normally required	
<b>Cleaner</b>	International GTA007	
<b>Work Stoppages</b>	Thoroughly flush all equipment with International GTA007. All unused material should be stored in tightly closed containers. Partially filled containers may show surface skinning and/or a viscosity increase of the material after storage.	
<b>Clean Up</b>	Clean all equipment immediately after use with International GTA007. 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

The detailed Interchar 404 Working Procedures must be consulted prior to use.

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. Low or high temperatures may require specific application techniques to achieve maximum film build. Over-application of Interchar 404 will extend both the minimum overcoating periods and handling times.

When applying Interchar 404 by brush, it may be necessary to apply multiple coats to achieve the total specified system dry film thickness.

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

When applying Interchar 404 in confined spaces ensure adequate ventilation.

The finished appearance of Interchar 404 is dependent on application method. For visible areas spray application is preferred. High decorative finishes may require additional preparation before application of sealer coat.

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

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

Interchar 404 should be protected from pooling or running water, condensation/high humidity and chemical attack at all times.

Interchar 404 is not designed for frequent water immersion/soaking.

Good initial durability allows for up to 6 months exterior exposure (in ISO 12944 C2) without the requirement for a sealer provided there is no pooled/heavy running water, or frequent high humidity/condensation.

### On site Grade Interchar 404i

An alternative grade of Interchar 404 is available and a separate datasheet is available on request.

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## SYSTEMS

### COMPATIBILITY

Interchar 404 has been tested as part of a coating system for use in fire situations over a wide range of approved priming systems.

The following primers are approved for use with Interchar 404:-

Intercure 200	Interplate 180
Intercure 200HS	Interplus 256
Intercure 420	Interseal 670HS
Intergard 251	Interzinc 52

The following topcoats are approved for use with Interchar 404:-

Intersheen 54	Interthane 870
Intersheen 579	Interthane 990

For other suitable primers, 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
- Practical & Theoretical Coverage
- Interchar 404 Recommended Working Procedures

## 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.

<b>PACK SIZE</b>	20 litre unit 200 litre unit	Interchar 404
<b>SHIPPING WEIGHT</b>	For availability of other pack sizes contact International Protective Coatings	
	U.N. Shipping No. 1263	
	20 litre unit 200 litre unit	27.4 kg Please contact International
<b>STORAGE</b>	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: 10/08/2004

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