Interchar® 2090

Acrylic Intumescent

PRODUCT DESCRIPTION

A single component, solvent borne, borate free, high solids, low VOC intumescent coating designed to provide fire protection to structural steelwork.

Independently tested at accredited laboratories to BS476 Parts 20-21, AS 1530.4-2014 and AS 4100, and third party assessed and certified.

INTENDED USES

To provide up to 2 hours fire protection on 'I' sections beams (including cellular beams), columns and hollow sections.

Suitable for both off-site and on-site application due to its ease of use, fast drying and handling properties. Can be used over a wide range of approved priming systems.

A version with greater water resistance is available which allows for Interchar 2090 to remain untopcoated for up to 6 months exterior exposure provided there is no pooled/heavy running water, or frequent high humidity conditions.

PRACTICAL INFORMATION FOR INTERCHAR 2090

Colour White (HFA290), White C (HFA292)

Gloss Level Matt

Volume Solids 75% ± 3% (measured according to ISO 3233 and ICF Method)

Typical Thickness 300-1500 microns (12-60 mils) dry equivalent to
400-2000 microns (16-80 mils) wet

Can be applied up to 1.5mm DFT in a single coat.

Theoretical Coverage 1 m²/litre at 750 microns d.f.t and stated volume solids
40 sq.ft/US gallon at 30 mils d.f.t and stated volume solids

Practical Coverage Allow appropriate loss factors

Method of Application Airless Spray, Brush

Drying Time

Temperature	Touch Dry	Hard Dry	Overcoating interval with self *Minimum*	*Maximum*
10°C (50°F)	60 minutes	24 hours	8 hours²	Extended¹
15°C (59°F)	40 minutes	20 hours	6 hours²	Extended¹
25°C (77°F)	30 minutes	16 hours	4 hours²	Extended¹

¹ See International Protective Coatings Definitions and Abbreviations
² Sealer coat should be applied as soon as possible after completion of the final coat of Interchar 2090 (minimum 2-4 hours for Intersheen 579; 24 hours for other topcoats). However, d.f.t. must be checked to ensure that specified thickness has been achieved before any sealer coat is applied.

All drying time data has been quoted at the typical thickness of 750 microns (30 mils) d.f.t.

For application at ambient temperatures of 25°C (77°F) and above, a tropical grade is available. See Product Characteristics.

REGULATORY DATA

Flash Point (Typical) 4°C (39°F)

Product Weight 1.38 kg/l (11.5 lb/gal)

VOC 230 g/kg EU Solvent Emissions Directive (Council Directive 2010/75/EU)

286 g/lt EU Product Directive (Council Directive 2004/42/EC)

Coating hazard marker GB 30981.2-S-Pb≤1000-NC Qualified for GB 30981.2-2025

See Product Characteristics section for further details

SURFACE PREPARATION

All steel 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.

Primed Surfaces

Interchar 2090 should always be applied over a recommended anti-corrosive coating scheme. The primer surface should be dry and free from all contamination and Interchar 2090 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 SP6 Abrasive Blasting or SSPC SP11, Power Tool Cleaning) and patch primed prior to the application of the product.

Consult the Interchar 2090 Application Guidelines for more details regarding surface preparation.

Metallic Zinc Primed Surfaces

Interchar 2090 can be applied over approved epoxy metallic zinc primers. Ensure that the primed surface is clean, dry and free from contamination and zinc salts, prior to application of the Interchar 2090. Ensure zinc primers are fully cured before overcoating. The use of a tie coat, typically Intergard 269 or Intergard 276, is recommended to prevent accumulation of zinc salts.

APPLICATION

Mixing	This material is a one component coating and should always be mixed thoroughly with a power agitator before application.	
Airless Spray	Recommended	Tip Range 0.48-0.58 mm (19-23 thou) Total output fluid pressure at spray tip not less than 176 kg/cm² (2503 p.s.i.)
Air Spray (Pressure Pot)	Not recommended	
Thinner	Not normally required	
Cleaner	International GTA007	Choice of cleaner maybe subject to local legislation. Please consult your local representative for specific advice.
Work Stoppages	Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with International GTA007. Partially filled containers may show surface skinning and/or a viscosity increase of the material after storage.	
Clean Up	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.	

PRODUCT CHARACTERISTICS

The detailed Interchar Solvent Based Application Guidelines should be consulted prior to use.

Required 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. When applying Interchar 2090 by brush, it may be necessary to apply multiple coats to achieve the total specified system dry film thickness.

For optimum drying properties when applying Interchar 2090 at dry film thicknesses above 750µm (30 mils), it is recommended that two coats are applied, observing the minimum overcoating times between coats. It is possible to apply Interchar 2090 up to 1500microns (80 mils) dry film thickness in a single coat, however, drying, hardness development and handling times will be longer. Time to handle will vary as a function of overall film thickness applied, humidity and ventilation rate.

For optimum application and drying characteristics, the air and substrate temperature should be greater than 10ºC (50ºF) and relative humidity less than 85%. Surface temperature must always be a minimum of 3°C (5°F) above dew point.

When applying Interchar 2090 in confined spaces ensure adequate ventilation.

The finished appearance of Interchar 2090 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.

Interchar 2090 (whether topcoated or not) should be protected from pooling or running water. Interchar 2090 is not designed for frequent water immersion/soaking.

The application of a sealer coat over Interchar 2090 must form a continuous film free of defects.

A version with greater water resistance characteristics, Interchar 2090 White C, is available, which may remain untopcoated for up to 6 months exterior exposure. However, Interchar 2090 (whether topcoated or not) should be protected from ponding/pooling or running water. Interchar 2090 is not designed for frequent water immersion/soaking. Note; in environmental exposure conditions other than internal dry (C1, as defined in ISO12944 Part 2), Interchar 2090 must always be suitably topcoated. See Application Guidelines for further information.

Tropical Grade

For improved product workability in warmer climates, a tropical grade version is available (White HFA291, White C HFA293). Interchar 2090 tropical grade has the following characteristics. Volume Solids 75%±3%; VOC 305g/l; Flash Point 27°C (81°F).

Drying Times:

			Overcoating Interval with Self	
Temperature	**Touch Dry**	**Hard Dry**	*Minimum*	*Maximum*
25°C (77°F)	60 minutes	24 hours	8 hours[2]	Extended[1]
40°C (104°F)	30 minutes	16 hours	6 hours[2]	Extended[1]

[1] See International Protective Coatings Definitions and Abbreviations.
[2] Sealer coat should be applied as soon as possible after completion of the final coat of Interchar 2090 (minimum 2-4 hours for Intersheen 579; 24 hours for other topcoats). However, d.f.t. must be checked to ensure that specified thickness has been achieved before any sealer coat is applied.

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

The following primers are approved for use with Interchar 2090

Intercure 200HS	Intergard 251
Intergard 251HS	Intergard 2575
Intergard 269	Intergard 276
Interprime 306	Interseal 670HS
Interseal 1052	Interzinc 52

The following topcoats are approved for use with Interchar 2090

Intersheen 579	Interthane 870
Interthane 990	Interthane 990SG

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
- Interchar Solvent Based Application Guidelines

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 Safety Data Sheet and the container(s), and should not be used without reference to the Safety Data Sheet (SDS).

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 AkzoNobel for further advice.

PACK SIZE	Unit Size	Vol	Pack
	20 litre	20 litre	20 litre

For availability of other pack sizes, contact AkzoNobel.

SHIPPING WEIGHT (TYPICAL)	Unit Size	
	20 litre	30 kg

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.

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.

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