Interchar® 1120

Water Borne Intumescent Coating

PRODUCT DESCRIPTION

A single component, borate and chlorine free, water-borne intumescent coating designed for on-site application to interior exposed structural steel requiring protection from cellulosic fire.

Interchar 1120 is a low VOC intumescent material independently fire tested for up to 3 hour fire ratings in accordance with ASTM E119/UL263, BS 476 20-22, EN 13381-8 and GB 14907.

Interchar 1120 is a CE marked product with European Technical Approval ETA-20/1193

INTENDED USES

To provide cellulosic fire protection on beams, columns and hollow sections in interior environments.

PRACTICAL INFORMATION FOR INTERCHAR 1120

Colour	White
Gloss Level	Matt
Volume Solids	68% ± 3% (measured according to ISO 3233 and BCF Guidance Method)
Typical Thickness	300-700 microns (12-28 mils) dry equivalent to 441-1029 microns (17.6-41.2 mils) wet Required film thickness is dependent upon fire rating
Theoretical Coverage	0.97 m²/litre at 700 microns d.f.t and stated volume solids 39 sq.ft/US gallon at 28 mils d.f.t and stated volume solids
Practical Coverage	Allow appropriate loss factors
Method of Application	Airless Spray, Brush, Roller

Drying Time

			Overcoating interval with self	
Temperature	**Touch Dry**	**Hard Dry**	*Minimum*	*Maximum*
10°C (50°F)	5 hours	6 hours	16 hours	Extended[1]
15°C (59°F)	4 hours	5 hours	12 hours	Extended[1]
25°C (77°F)	2 hours	4 hours	6 hours	Extended[1]
40°C (104°F)	1 hour	3 hours	3 hours	Extended[1]

[1] See International Protective Coatings Definitions and Abbreviations

All drying time data has been quoted at the typical thickness of 700 microns (28 mils) d.f.t. and assuming good air flow.

Minimum overcoating interval of Interchar 1120 with topcoats is 24 hours. Further details on minimum overcoating times are contained in the Application Guidelines.

REGULATORY DATA

Flash Point (Typical)	>101°C (214°F)	
Product Weight	1.4 kg/l (11.7 lb/gal)	
VOC	0.16 lb/gal (20 g/lt) 0 g/kg	EPA Method 24 EU Solvent Emissions Directive (Council Directive 2010/75/EU)

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

See Product Characteristics section for further details

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.

Primed Steelwork

Interchar 1120 should always be applied over a recommended anti-corrosive coating scheme. The primer surface should be dry and free from all contamination and Interchar 1120 must be applied within the overcoating intervals specified (consult the Interchar 1120 Application Guidelines).

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 a full coat of primer applied prior to overcoating with Interchar 1120.

Metallic Zinc Primed Surfaces

Interchar 1120 can be applied over approved epoxy metallic zinc primers, provided that these have been overcoated with an approved tie coat. Ensure that the primed surface is clean, dry and free from contamination prior to application of the Interchar 1120. Recommended tie coats are Intergard 269 or Intergard 276.

APPLICATION

Mixing	This material is a one component coating and should always be mixed thoroughly with a power agitator before application.	
Mix Ratio	Not applicable	
Airless Spray	Recommended	Tip Range 0.43-0.53 mm (17-21 thou) Total output fluid pressure at spray tip not less than 175 kg/cm² (2489 p.s.i.)
Air Spray (Pressure Pot)	Not recommended	
Air Spray (Conventional)	Not suitable	
Brush	Suitable	Recommended for small areas and repairs, multiple coats will be necessary to achieve the required dry film thickness.
Roller	Suitable - Small areas	Typically 100-300 microns (4.0-12.0 mils) can be achieved
Thinner	Not normally required.	
Cleaner	Clean Water	
Work Stoppages	Do not allow material to remain in hoses, guns or spray equipment. Thoroughly flush all equipment with clean water. ***Do not use organic solvents.*** All unused material should be stored in tightly closed containers. Partially filled containers may show surface skinning after storage.	
Clean Up	Clean all equipment immediately after use with clean water. 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 1120 Application Guidelines should be consulted prior to use.

Interchar 1120 is approved to a wide range of international standards; please contact International Protective Coatings for advice on fire resistance limits and certification.

Where approval to UL263 is required, product reference HFA122 should be requested.

Interchar 1120 must be protected from freezing at all times during storage and transport. For optimum application and drying characteristics, the air and substrate temperature should be greater than 10ºC (50ºF) and relative humidity less than 85%. Good air flow and ventilation should be maintained to improve drying and recoat properties and speed up the application. Application at temperatures below 10ºC (50ºF) will retard drying and extend overcoatings intervals, as will higher humidities.

Discard frozen Interchar 1120 in accordance with local disposal regulations. Do not thaw frozen material and apply.

Surface temperature must always be a minimum of 3°C (5°F) above dew point. In line with good painting practice, application should not take place in conditions which are deteriorating, e.g. the temperature is falling or there is a risk of condensation forming.

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.

Care must be taken not to over-apply on areas such as internal angles, corners, edges, etc.

The finished appearance of Interchar 1120 is dependent on application method. For visible areas spray application is preferred, which can provide a smooth finish. Higher decorative finishes may require additional preparation before application of topcoats; please see Application Guidelines for further information. Sealer coats are not necessary in environments which are classed as ISO 12944-2 C1.

Interchar 1120 is approved for interior exposure environments classified in accordance with ISO 12944. Consult International Paint for the appropriate primer and topcoat systems for the specified interior environment.

Interchar 1120 is UL listed for use in Conditioned Interior Space and Interior General Purpose conditions without a topcoat.

Interchar 1120 (whether sealed or not) should be protected from pooling or running water.

Interchar 1120 is not designed for frequent water immersion/soaking.

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 1120:

Intercryl 525	Intergard 251HS	Interlac 573
Intercure 200	Intergard 2509	Interprime 306
Intercure 200HS	Intergard 269	Interseal 670HS
Intergard 251	InterH2O 499	Interseal 1052

Interchar 1120 may also be applied over Interzinc 52 providing a suitable tie coat is also used; please see Surface Preparation section.

The following topcoats are approved for use with Interchar 1120

Intercryl 525	Intersheen 579
Interthane 870	Interthane 990
Interthane 990SG	

There is a wider range of primers and topcoats which may be suitable for use with Interchar 1120; please contact International Protective Coatings for further information and assistance.

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 single pack water-borne intumescent coatings 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
5 US gal	5 US gal	5 US gal

For availability of other pack sizes, contact AkzoNobel.

SHIPPING WEIGHT (TYPICAL)

Unit Size	
20 litre	30.2 kg
5 US gal	68.3 lb

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. Protect from frost.

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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