

Aliphatic Polyurethane

PRODUCT DESCRIPTION

A two component isocyanate cured polyurethane coating. It is a high performance, non-yellowing product that is easy to apply and is tintable in a wide range of colours.

It has excellent gloss and colour retention and has good chemical, abrasion and impact resistance. If enhanced slip resistance is required a suitable aggregate can be used in the system. To be used as a topcoat in atmospheric environments. Suitable on approved primers on concrete surfaces.

INTENDED USES

Designed for a wide range of floors with various levels of mechanical and chemical exposure. Specially designed for areas exposed to direct sunlight where gloss and colour stability is desired. Recommended as a topcoat as part of the car parks, parking bays, pedestrian walkways, industrial floors, drive ways, ramps and traffic deck systems.

PRACTICAL INFORMATION FOR INTERBUILD 1091

Colour	Wide range via the Chromascan system			
Gloss Level	Semi-gloss			
Volume Solids	72% ± 3% (depends on colour)			
Typical Thickness	50-75 microns (2-3 mils) dry equivalent to 69-104 microns (2.8-4.2 mils) wet			
Theoretical Coverage	14.40 m ² /litre at 50 microns d.f.t and stated volume solids 577 sq.ft/US gallon at 2 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>
5°C (41°F)	5 hours	24 hours	24 hours	Extended ¹
15°C (59°F)	2.5 hours	10 hours	10 hours	Extended ¹
25°C (77°F)	1.5 hours	6 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

REGULATORY DATA

Flash Point (Typical)	Part A 34°C (93°F); Part B 49°C (120°F); Mixed 35°C (95°F)	
Product Weight	1.47 kg/l (12.3 lb/gal)	
VOC	236 g/kg	EU Solvent Emissions Directive (Council Directive 2010/75/EU)

See Product Characteristics section for further details

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SURFACE PREPARATION

Primed Surfaces

Interbuild 1091 should always be applied over a recommended Interbuild coating scheme. The primer surface should be dry and free from all contamination and Interbuild 1091 must be applied within the overcoating intervals specified (consult the relevant product data sheet).

Concrete Substrates

Concrete should have a minimum strength of 20MPa. All surfaces should be clean and free from laitance, curing compounds, release agents, efflorescence, grease, oil, dirt, organic growth, old coatings and loose or disintegrating concrete. Smooth surfaces should be roughened, using high pressure water jetting or similar techniques.

Laitance deposits are best removed by planetary diamond disc grinder or by captive blasting followed by vacuum cleaning to remove dust debris. For old concrete, a site visit by the local AkzoNobel technical representative should be undertaken to assess the condition and provide an appropriate surface preparation method.

All surfaces to be coated should be clean, dry and free from contamination. Prior to lining application, all surfaces should be assessed and treated in accordance with 8504:2000.

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

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.	
	<ol style="list-style-type: none"> (1) Agitate Base (Part A) with a power agitator. (2) Agitate Curing Agent (Part B) with a power agitator. (3) Combine entire contents of Curing Agent (Part B) with Base (Part A) and mix thoroughly with power agitator. 	
Mix Ratio	6 part(s) : 1 part(s) by volume	
Working Pot Life	25°C (77°F) 2 hours	
Airless Spray	Recommended	Tip Range 0.33-0.45 mm (13-18 thou) Total output fluid pressure at spray tip not less than 155 kg/cm ² (2204 p.s.i.)
Brush	Recommended	Use a stiff nylon brush.
Roller	Recommended	Use a short nap roller.
Thinner	International GTA713	Thinning is not normally required. Do not thin more than allowed by local environmental legislation.
Work Stoppages	Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with International GTA713. 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 GTA713. 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 Application Guidelines should be consulted prior to use.

Level of sheen and surface finish are dependent on application method. Avoid using a mixture of application methods whenever possible.

For brush and roller application, and in some colours, two coats of Interbuild 1091 may be required to give uniform coverage, especially when applying Interbuild 1091 over dark undercoats, and when using certain lead free bright colours such as yellows and oranges.

When overcoating after weathering or ageing, ensure the coating is fully cleaned to remove all surface contamination such as oil, grease, salt crystals and traffic fumes, before application of a further coat of Interbuild 1091.

Absolute measured adhesion of topcoats to aged Interbuild 1091 is less than that to fresh material, however, it is adequate for the specified end use.

This product must only be thinned using recommended thinners.

When applying Interbuild 1091 in confined spaces ensure adequate ventilation.

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

Premature exposure to ponding water may cause colour change, especially in dark colours and at low temperatures.

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.

Low molecular weight reactive additives, which will form part of the film during normal ambient cure conditions, will also affect VOC values determined using EPA Method 24.

SYSTEMS COMPATIBILITY

Interbuild 1091 should always be applied over correctly prepared primed substrates. Suitable primers are:

- Interbuild 1002
- Interbuild 1004
- Interbuild 1072

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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 documents available at www.international-pc.com:

- 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 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.

Warning: Contains isocyanate. Wear air-fed hood for spray application.

PACK SIZE	Unit Size	Part A		Part B	
		Vol	Pack	Vol	Pack
	20 litre	17.14 litre	20 litre	2.86 litre	3.7 litre

For availability of other pack sizes, contact AkzoNobel.

SHIPPING WEIGHT (TYPICAL)	Unit Size	Part A	Part B
		20 litre	26.9 kg

STORAGE	Shelf Life	
		24 months 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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