

Epoxy

PRODUCT DESCRIPTION

A low VOC, high build, high solids two component multi purpose epoxy coating.

A high performance surface tolerant primer finish or intermediate coat with outstanding water, chemical and solvent resistance. Interplus 1180 has fast cure at room temperature and outstanding cure at low temperatures.

INTENDED USES

A high performance coating providing excellent anti-corrosive protection for both atmospheric and immersion service e.g. offshore oil platforms, shiploaders, coal wash plants, bridges, piping, general structural steel and water containment structures.

For application to a variety of substrates including hand prepared rusty steel, abrasive blast cleaned and hydroblasted steel, concrete and a range of intact, aged coatings.

PRACTICAL INFORMATION FOR INTERPLUS 1180

Colour Wide range via the Chromascan system, Bright Aluminium, MIO

Gloss Level Semi Gloss

Volume Solids 84% ± 3% depending on colour

Typical Thickness 125-250 microns (5-10 mils) dry equivalent to
149-298 microns (6-11.9 mils) wet

Theoretical Coverage 5.60 m²/litre at 150 microns d.f.t and stated volume solids
225 sq.ft/US gallon at 6 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

Temperature	Touch Dry	Hard Dry	Overcoating Interval with recommended topcoats	
			Minimum	Maximum
10°C (50°F)	16 hours	20 hours	20 hours	3 months
15°C (59°F)	9 hours	11 hours	11 hours	56 days
25°C (77°F)	4 hours	5 hours	5 hours	28 days
40°C (104°F)	2 hours	2.5 hours	2.5 hours	14 days

- For maximum overcoating intervals for external exposure, please consult International Protective Coatings for specific re-coat windows.
- Maximum overcoating intervals are shorter when using polysiloxane topcoats. Consult International Protective Coatings for further details.
- Minimum and maximum overcoating windows relate to constant substrate temperatures.
- For curing at low temperatures an alternative curing agent is available. See Product Characteristics for details.

REGULATORY DATA

Flash Point (Typical) Part A 27°C (81°F); Part B 24°C (75°F); Mixed 27°C (81°F)

Product Weight 1.67 kg/l (13.9 lb/gal)

VOC 1.61 lb/gal (193 g/lit) EPA Method 24

See Product Characteristics section for further details

Protective Coatings

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SURFACE PREPARATION

The performance of this product will depend upon the degree of surface preparation. The surface 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.

Accumulated dirt and soluble salts must be removed. Dry bristle brushing will normally be adequate for accumulated dirt. Soluble salts should be removed by fresh water washing.

Abrasive Blast Cleaning

For immersion service, Interplus 1180 must be applied to surfaces blast cleaned to Sa2½ (ISO 8501-1:2007) or SSPC-SP10. For atmospheric exposure best performance will be achieved when Interplus 1180 is applied to surfaces prepared to Sa2½ (ISO 8501-1:2007) or SSPC-SP10; a minimum of Sa2 (ISO 8501-1:2007) or SSPC-SP6 must be achieved.

Surface defects revealed by the blast cleaning process should be ground, filled, or treated in the appropriate manner.

Hand or Power Tool Preparation

Hand or power tool clean to a minimum of St2 (ISO 8501-1:2007) or SSPC-SP2.

Note, all scale must be removed and areas which cannot be prepared adequately by chipping or needle gun should be spot blasted to a minimum standard of Sa2 (ISO 8501-1:2007) or SSPC-SP6. Typically this would apply to C or D grade rusting in this standard.

Ultra High Pressure Hydroblasting / Abrasive Wet Blasting

May be applied to hydroblasted surfaces previously prepared to Sa2½ (ISO 8501-1:2007) or SSPC-SP6 which have flash rusted to no worse than Grade HB2½M (refer to International Hydroblasting Standards) or Grade SB2½M (refer to International Slurry Blasting Standards). It is also possible to apply to damp surfaces in some circumstances. Further information is available from International Protective Coatings.

Concrete

Interplus 1180 may be applied to concrete. Refer to International Protective Coatings' Concrete Surface Preparation Guidelines for further information.

Aged Coatings

Interplus 1180 is suitable for overcoating a limited range of intact, tightly adherent aged coatings. Loose or flaking coatings should be removed back to a firm edge. Glossy finishes may require light abrasion to provide a physical 'key'. See Product Characteristics section for further information.

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) Combine entire contents of Curing Agent (Part B) with Base (Part A) and mix thoroughly with power agitator. 			
Mix Ratio	4 part(s) : 1 part(s) by volume			
Working Pot Life	10°C (50°F) 16 hours	15°C (59°F) 8 hours	25°C (77°F) 4 hours	40°C (104°F) 2 hours
Airless Spray	Recommended	Tip Range 0.45-0.58 mm (18-23 thou) Total output fluid pressure at spray tip not less than 176 kg/cm ² (2503 p.s.i.)		
Air Spray (Pressure Pot)	Recommended	Gun Air Cap Fluid Tip	DeVilbiss MBC or JGA 704 or 765 E	
Brush	Suitable	Typically 90 microns (3.6 mils) can be achieved		
Roller	Suitable	Typically 125 microns (5.0 mils) can be achieved		
Thinner	International GTA220; Do not thin more than allowed by local environmental legislation			
Cleaner	International GTA220			
Work Stoppages	Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with International GTA220. 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 GTA220. 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

For water immersion service, surface preparation to a minimum of Sa2½ (ISO 8501-1:2007) or SSPC-SP10 followed by application of multi-coats of Interplus 1180 to a total minimum dry film thickness of 300 microns (12 mils) is required.

If salt water is used in the wet blast process the resulting surface must be thoroughly washed with fresh water before application of Interplus 1180. With freshly blasted surfaces a slight degree of flash rusting is allowable, and is preferable to the surface being wet. Puddles, ponding and accumulations of water must be removed.

Interplus 1180 is suitable to be applied over damp surfaces, however overall performance will be less than when applied over dry surfaces.

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. Application by air spray may require a multiple cross spray pattern to attain maximum film build. Low or high temperatures may require specific application techniques to achieve maximum film build.

Interplus 1180 is suitable for overcoating most intact, aged alkyd, epoxy and polyurethane systems. A test patch is recommended. However, this product is not recommended over thermoplastic coatings such as chlorinated rubbers and vinyls. Please consult International Protective Coatings for alternative recommendations.

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

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

In common with all epoxies, Interplus 1180 will chalk and discolour on exterior exposure.

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 Temperature Curing

An alternative curing agent is available which enables Interplus 1180 to offer genuine low temperature cure capability and rapid cure at temperatures less than 10°C (50°F). However, use of this curing agent will give an initial shade variation and more rapid discolouration on weathering. For aesthetic purposes, the use of a suitable finish coat is recommended with the use of the low temperature curing agent. Interplus 1180 is also capable of curing at temperatures below 0°C (32°F). However, this product should not be applied at temperatures below 0°C (32°F) where there is a possibility of ice formation on the substrate.

Touch dry times shown below are actual drying times due to chemical cure, rather than physical set due to solidification of the coating film at temperatures below 0°C (32°F)

Temperature	Touch Dry	Hard Dry	Overcoating Interval with recommended topcoats	
			Minimum	Maximum
0°C (32°F)	12 hours	25 hours	25 hours	3 months
10°C (50°F)	8 hours	15 hours	15 hours	3 months
15°C (59°F)	6 hours	10 hours	10 hours	56 days
25°C (77°F)	3 hours	5 hours	5 hours	28 days
40°C (104°F)	1.5 hours	2.5 hours	2.5 hours	14 days

SYSTEMS COMPATIBILITY

Interplus 1180 will normally be applied to correctly prepared steel substrates. However, it can be used over suitably primed surfaces.

Suitable primers are:

Intercure 200	Interzinc 22
Intergard 251	Interzinc 2280
Intergard 269	Interzinc 42
Interseal 1036	Interzinc 52

Where a cosmetically acceptable topcoat is required the following products are recommended:

Interfine 1080	Interfine 979
Interfine 629	Interthane 870
Interfine 878	Interthane 990

When topcoating with Interfine 878, Interfine 979 or Interfine 1080 please consult the relevant Application Guidelines.

For other suitable primers/topcoats, 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 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 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.

PACK SIZE	Unit Size	Part A		Part B	
		Vol	Pack	Vol	Pack
	5 litre	4 litre	5 litre	1 litre	1 litre
	20 litre	16 litre	20 litre	4 litre	4 litre
For availability of other pack sizes, contact International Protective Coatings.					
SHIPPING WEIGHT (TYPICAL)	Unit Size	Part A		Part B	
	5 litre	7.8 kg		1.08 kg	
	20 litre	29.9 kg		4.4 kg	
STORAGE	Shelf Life	24 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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