

Acrylic Polyurethane

PRODUCT DESCRIPTION

A two component, high gloss, low VOC, high solids, fast curing, acrylic polyurethane primer/finish pigmented with zinc phosphate to provide added anti corrosive performance and a durable, decorative finish.

INTENDED USES

Specifically designed as part of the International 3200 product series for use as a single or two coat primer/finish coating system to protect construction and mining heavy machinery, agricultural equipment, railcars, transportation vehicles, material handling and lifting equipment, pumps, valves, gear units and other small motors and machinery.

Interthane 3230HG is particularly suited for use as a rapid drying system for fast handling times and maximising the production throughput. This contributes to lower energy consumption and stoving emissions at or below 40°C compared to conventional alkyd enamel products which typically requires force drying above 40°C.

The main features of Interthane 3230HG are:-

- Good adhesion properties over correctly prepared steel, galvanised steel and stainless steel
- Lead chromate free
- Quick handling times and fast drying at high volume solids
- Good gloss and colour retention
- Versatile application thickness to allow single or two coat applications

PRACTICAL INFORMATION FOR INTERTHANE 3230HG

| | |
|------------------------------|--|
| Colour | Colours available on request |
| Gloss Level | 85+ gloss units at 60° angle (See Product Characteristics) |
| Volume Solids | 62% ± 2% |
| Typical Thickness | 60-100 microns (2.4-4 mils) dry equivalent to 97-161 microns (3.9-6.4 mils) wet |
| Theoretical Coverage | 10.30 m ² /litre at 60 microns d.f.t and stated volume solids 414 sq.ft/US gallon at 2.4 mils d.f.t and stated volume solids |
| Practical Coverage | Allow appropriate loss factors |
| Method of Application | Airless Spray, Air assisted airless spray, Air Spray, Brush, Plural Component Airless Spray, Roller |

Drying Time

| Temperature | Touch Dry | Hard Dry | Overcoating interval with self | |
|--------------|------------|------------|--------------------------------|-----------------------|
| | | | Minimum | Maximum |
| 15°C (59°F) | 2.5 hours | 10 hours | 10 hours | Extended ¹ |
| 25°C (77°F) | 90 minutes | 6 hours | 6 hours | Extended ¹ |
| 40°C (104°F) | 60 minutes | 3 hours | 3 hours | Extended ¹ |
| 60°C (140°F) | 50 minutes | 90 minutes | 90 minutes | Extended ¹ |

¹ See International Protective Coatings Definitions and Abbreviations

REGULATORY DATA

| | |
|------------------------------|---|
| Flash Point (Typical) | Part A 34°C (93°F); Part B 50°C (122°F); Mixed 35°C (95°F) |
| Product Weight | 1.24 kg/l (10.3 lb/gal) |
| VOC | 333 g/kg EU Solvent Emissions Directive (Council Directive 2010/75/EU) |

See Product Characteristics section for further details

Protective Coatings

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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 8504:2000. Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

Suitable for use over phosphate washed steel.

Steel

Abrasive blast clean to a minimum of Sa2½ (ISO 8501-1:2007) or SSPC-SP6. If oxidation has occurred between blasting and application of Interthane 3230HG the surface should be re-blasted to the specified visual standard. Surface defects revealed by the blast cleaning process should be ground, filled, or treated in the appropriate manner.

A surface profile of 40-60 microns (1.6-2.4 mils) is recommended. Lower surface profiles of 20-30 microns (0.8-1.2 mils) can be used to improve the overall aesthetics of the overall paint system.

Stainless Steel, Galvanised Steel and Aluminium

Remove dirt and oils by solvent cleaning or other suitable detergent/cleaner followed by a thorough water rinsing. Sand or abrasive sweep blast to a standard similar to ISO 8501-1:2007 Sa1 or SSPC SP7 to create a surface profile.

Primed Surfaces

The primer surface should be dry and free from all contamination and Interthane 3230HG 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 and patch primed prior to the application of Interthane 3230HG.

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. | | |
| | (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 | 6 part(s) : 1 part(s) by volume | | |
| Working Pot Life | 15°C (59°F) 7 hours | 25°C (77°F) 4 hours | 40°C (104°F) 2 hours |
| Plural Component Airless Spray | Recommended | | |
| 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.) For air-assisted airless spray, use suitable proprietary equipment. Electrostatic spray application will require an appropriate trial. | |
| Air Spray (Pressure Pot) | Recommended | Gun Air Cap Fluid Tip | DeVilbiss MBC or JGA 704 or 765 E |
| Brush | Suitable - small areas only | Typically 50-75 microns (2.0-3.0 mils) can be achieved | |
| Roller | Suitable - small areas only | Typically 50-75 microns (2.0-3.0 mils) can be achieved | |
| Thinner | International GTA713 | Do not thin more than allowed by local environmental legislation | |
| Cleaner | International GTA713 | | |
| 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

Interthane 3230HG is part of the International 3200 product series and is specifically designed for use where automated paint application and forced curing processes are in operation.

To ensure the correct use of International 3200 product series, it is recommended that the guidance in section 8.4 of ISO 12944-5:2018 is followed. Contact International Protective Coatings for further advice.

Polyurethane based anti-corrosive products are most suitable for the protection of light industrial steelwork in internal dry environments or on exposed steelwork which is situated in low corrosivity environments corresponding to ISO12944 C1, C2 and C3.

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

The gloss levels quoted are typical values achieved with this product. This is subject to application method, dry film thickness and environmental conditions within a controlled OEM painting facility. It is always recommended that appropriate product application trials are carried out to ensure satisfactory levels are achieved.

Gloss level achieved may differ if there is excessive variation in cure temperature and application thickness.

Excessive film thickness and/or over-application of Interthane 3230HG will increase the time to handle, and lengthen drying and overcoating times.

The premature exposure of Interthane 3230HG to ponding water will cause a colour change which may be permanent. This is a cosmetic effect and will not affect the anti-corrosive protection offered by Interthane 3230HG.

In some colours more than one application may be required to give uniform coverage.

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

Interthane 3230HG can be applied directly to abrasive blast cleaned surfaces. However, when improved anti-corrosive performance is required the following primers are recommended:

Intergard 3210

Interthane 3230HG may be overcoated with itself or the following topcoats;

Interthane 3230G
Interthane 3230HG
Interthane 3230M
Interthane 3230SG

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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 | 5 litre |

For availability of other pack sizes, contact AkzoNobel.

| SHIPPING WEIGHT (TYPICAL) | Unit Size | Part A | Part B |
|---------------------------|-----------|----------|---------|
| | | 20 litre | 23.5 kg |

| 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. |
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| | | |

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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