InterH2O® 699

International®

Water Based Polyurethane

PRODUCT DESCRIPTION

A two component water borne acrylic polyurethane finish giving excellent durability and long term recoatability.

INTENDED USES

Suitable for use in new construction systems which can be used in a wide variety of environments, including commerical infrastructure, factories, processing industries and oil and gas facilities.

PRACTICAL INFORMATION FOR INTERH2O 699

Colour	Range
Gloss Level	Gloss
Volume Solids	42% ± 3% (depends on colour)
Typical Thickness	35-45 microns (1.4-1.8 mils) dry equivalent to 83-107 microns (3.3-4.3 mils) wet
Theoretical Coverage	10.50 m²/litre at 40 microns d.f.t and stated volume solids 421 sq.ft/US gallon at 1.6 mils d.f.t and stated volume solids
Practical Coverage	Allow appropriate loss factors
Method of Application	Airless Spray

Drying Time

			Overcoating Interval with recommended topcoats	
Temperature	**Touch Dry**	**Hard Dry**	*Minimum*	*Maximum*
10°C (50°F)	4 hours	16 hours	16 hours	Extended[1]
15°C (59°F)	4 hours	8 hours	8 hours	Extended[1]
25°C (77°F)	3.5 hours	6 hours	6 hours	Extended[1]
40°C (104°F)	2 hours	3 hours	3 hours	Extended[1]

[1] See International Protective Coatings Definitions and Abbreviations
Overcoating interval can vary markedly with film thickness, humidity and in particular, air flow.

REGULATORY DATA

Flash Point (Typical)	Part A 101°C (214°F); Part B 62°C (144°F); Mixed 101°C (214°F)	
Product Weight	1.24 kg/l (10.3 lb/gal)	
VOC	61 g/kg	EU Solvent Emissions Directive (Council Directive 1999/13/EC)

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.

Primed Surfaces

InterH2O 699 should always be applied over a recommended anti-corrosive coating scheme. The primer surface should be dry and free from all contamination and InterH2O 699 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 InterH2O 699.

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.
(3) **Once mixed do not seal tins - pressure build up may lead to explosion**.

Mix Ratio

4 part(s) : 1 part(s) by volume

Working Pot Life

10°C (50°F)	15°C (59°F)	25°C (77°F)	40°C (104°F)
2 hours	2 hours	2 hours	1 hour

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/cm² (2204 p.s.i.)	
Air Spray (Pressure Pot)	Recommended	Gun Air Cap Fluid Tip	DeVilbiss MBC or JGA 704 or 765 E
Brush	Suitable - small areas only	Typically 30-40 microns (1.2-1.6 mils) can be achieved	
Roller	Suitable - small areas only	Typically 30-40 microns (1.2-1.6 mils) can be achieved	
Thinner	Not recommended		

Cleaner

International GTA991 followed by clean potable water.

Work Stoppages

Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with International GTA991. 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 GTA991. 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. Consult InterH2O 699 Application Guidelines for further details.

All surplus material and empty containers should be disposed of in accordance with appropriate regional regulations/legislation.

PRODUCT CHARACTERISTICS

Apply by air or airless spray. Thoroughly flush equipment with International GTA991 thinner, or alcohol, followed by water prior to use. To obtain maximum edge protection and film build, airless or air spray application is recommended. Application by other methods, e.g. brush or roller, may require more than one coat.

As with all water borne coatings careful control of application conditions is required to ensure good performance.

The following basic parameters must be adhered to:

InterH2O 699 must be protected from freezing at all times during storage and transport. The recommended storage temperature is between 4°C (39°F) and 25°C (77°F).

The minimum steel temperature for application must be above 10°C (50°F), and be at least 3°C (5° F) above dew point.

The relative humidity should be lower than 80% otherwise drying and overcoating times will be severely extended and films will show an increase likelihood of foaming. Good airflow is essential around the object being painted [minimum air speed 0.1m/sec (4 inches/sec)].

Minor areas which are difficult to ventilate should be brush applied to prevent over-application.

Over-application of InterH2O 699 will extend both the minimum overcoating periods and handling times. Over-application will also increase microfoam in the dry film resulting in low gloss.

To ensure good aged overcoating of InterH2O 699 by other materials the surface must be clean, dry and free from contamination, particularly if the surface profile is rough due to the presence of micaceous iron oxide.

SYSTEMS COMPATIBILITY

The following primers/intermediates are recommended for InterH2O 699:

Intercure 200HS
Intercure 420
Intergard 251
Intergard 475HS
InterH2O 401
InterH2O 499
Interplus 356

The following topcoats are recommended for InterH2O 699:

InterH2O 699
Interseal 121
Interthane 990

For other suitable primers/intermediates consult International Protective Coatings.

ADDITIONAL INFORMATION

Further information regarding industry standards, terms and abbreviations used in this data sheet can be found in the following documents available

- Definitions & Abbreviations
- Surface Preparation
- Paint Application
- Theoretical & Practical Coverage
- InterH2O 699 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 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.

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

Warning: Do not seal tins containing mixed material. Pressure build up may cause explosion.

PACK SIZE

Unit Size	Part A Vol	Part A Pack	Part B Vol	Part B Pack
20 litre	16 litre	20 litre	4 litre	5 litre

For availability of other pack sizes, contact International Protective Coatings.

SHIPPING WEIGHT (TYPICAL)

Unit Size	Part A	Part B
20 litre	22.16 kg	4.88 kg

U.N. Shipping No. Non Hazardous

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.

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.