

Polibrid 705-E

Polyurethane

PRODUCT DESCRIPTION A TWO COMPONENT Solvent free elastomeric urethane.
A chemically resistant elastomeric urethane which can be applied by heated, twin-feed airless spray.

INTENDED USES Polibrid 705-E provides the ultimate in corrosion protection for concrete or steel in potable water service. Protects against microbiologically induced corrosion, making it ideal for waste water applications. Ideal for encapsulation of rivets, bolts, edges and other surface imperfections. Suitable for numerous immersion, chemical resistant and abrasion resistant applications.

PRACTICAL INFORMATION FOR POLIBRID 705-E

Colour Buff
Volume Solids 100%
Typical Thickness 700-5000 microns (27.6 - 196.9 mil) dry
 equivalent to 700-5000 microns (27.6 - 196.9 mil) wet
Theoretical Coverage 0.50 m²/Litre at 2000 micron DFT and stated volume solids.
 20 ft²/US Gallon at 78.7 mil DFT and stated volume solids
Practical Coverage Allow appropriate loss factors
Method of Application Heated Twin Feed Airless Spray
Drying / Peel Times

Temperature Interval	Touch Dry	Hard Dry	Maximum Overcoating With Polibrid 705-E
15°C (59°F)	2 hours	2 Days	2 Hours
25°C (77°F)	1 hour	1 Day	1 Hour
40°C (104°F)	40 mins	1 Day	40mins

*See International Protective Coatings Definitions and Abbreviations

REGULATORY DATA

Flash Point Part A >200°C Part B 110 °C Mixed 110 °C
Product Weight 1.14 kg/l (9.5 lb/US gal)
VOC 0 g/l UK-PG6/23(92). Appendix 3
 0.00 lb/US gal (0 g/l) USA-EPA Method 24
 0 g/l Calculated

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SURFACE PREPARATION

Please consult the Polibrid 705-E Recommended Working Procedures prior to commencing surface preparation.

Steel

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.

Abrasive Blast

Abrasive blast clean to Sa2½ (ISO 8501-1:1988) or SSPC SP10. If oxidation has occurred between blasting and application of Polibrid 705E, the surface should be reblasted 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 at least 90 microns is recommended.

While application direct to substrate is preferred, the use of Intergard 348 as a holding primer can be accommodated (refer Working Procedures). Alternatively, the blast standard can be maintained by the use of dehumidification.

Concrete

For applications over concrete substrates, the use of a geotextile fabric should always be considered. Please consult the Polibrid 705-E Recommended Working Procedures document for details of surface preparation and application.

APPLICATION

Mixing	Polibrid 705-E MUST be applied in accordance with the Polibrid 705-E Recommended Working Procedures. Thoroughly mix Part A with air-driven agitator for 30 minutes just prior to use. Part B requires no agitation before using		
Mix Ratio	2:1 by volume		
Working Pot	150°C (590°F) 5 Minutes	250°C (770°F) 3 Minutes	400°C (1040°F) 1 Minute
Airless Spray	Recommended	- Tip range 0.63-0.89 mm (25-35 thou) - Total output fluid pressure at spray tip not less than 211 kg/cm ² (3,000 p.s.i.)	
Air Spray	Not recommended (Pressure Pot)		
Brush	Not recommended		
Roller	Not Recommended		
Thinner	Not suitable - DO NOT THIN		
Cleaner	International GTA203 - N.B. Clean all equipment immediately after use.		
Work Stoppages	Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with International GTA203		
Clean Up	Clean all equipment immediately after use with International GTA203. It is good working practice to periodically flush out spray equipment during the course of the working day. All surplus materials and empty containers should be disposed of in accordance with appropriate regional regulations/legislation		

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PRODUCT CHARACTERISTICS

Polibrid 705-E is a premium quality, thermosetting elastomer that meets all known VOC regulations and is virtually odourless during and after application. It eliminates the creation of pinholes due to solvent evaporation, producing a dense monolithic membrane. It is sufficiently elastic to withstand normal shrinkage cracks in concrete without breaking.

An ideal immersion lining, it is abrasion-resistant, chemical resistant, highly impermeable and can be placed in service as soon as touch dry. Easy to repair if needed.

Not recommended for exposure to concentrated acids, aromatic hydrocarbons, ketones or chlorinated solvents.

Polibrid 705-E is sensitive to the presence of moisture and must not be applied to wet or damp substrates at any time.

SYSTEM COMPATIBILITY

The following primers / intermediates are recommended for Polibrid 705-E:

Intergard 348

For other suitable primers / intermediates, consult International Protective Coatings.

The following products are recommended for overcoating Polibrid 705-E:

Polibrid 705-E

For other suitable products, 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 sections of the International Protective Coatings data manual

- Definitions & Abbreviations
- Surface Preparation
- Paint Application
- Theoretical & Practical Coverage

Individual copies of these information sections are available from:

www.international-pc.com/pc/technical/tech_papers/online.asp

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 Recommended Working Procedures, the Material Safety Data Sheets and the container(s), and should not be used without reference to the Material Safety Data Sheets 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 and Environment 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	203 Litres	Part A - Polibrid 700A-E	200 Litre Steel Drum
	203 Litres	Part B - Polibrid 705B	200 Litre Steel Drum
For availability of other pack sizes contact International Protective Coatings			
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.	

Disclaimer

The information given in this sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. Any warranty, if given, or specific Terms & Conditions of Sale are contained in International's Terms & Conditions of Sale, a copy of which can be obtained on request. While we endeavor to ensure that all advice we give about the product (whether in this sheet or otherwise) is correct we have no control over either the quality or 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 whatsoever or howsoever arising for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of the use of the product. The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.

It is the user's responsibility to check that this sheet is current prior to using the product. Issue date: 30/8/05

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International Protective Coatings

Worldwide Availability

<u>World Centre</u>	<u>Asia Region</u>	<u>Australasia Region</u>	<u>Europe Region</u>	<u>Middle East Region</u>	<u>North America Region</u>	<u>South America Region</u>
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