irathanefutura

TECHNICAL DATA SHEET - POLYUREA 2000

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PRODUCT DESCRIPTION

A two component 100% solids hot spray applied elastomeric coating system capable of producing a seam free membrane typically on concrete or steel substrates. WRAS approved in the UK for applications requiring BS 6920.

RECOMMENDED APPLICATIONS

- Sealing of concrete and steel tanks and structures
- Lining structures for secondary containment
- External waterproofing on water towers and reservoir roofs
- Lining of sewage digesters

FEATURES

- 100% Solids
- Fast set, walk on in minutes

PACKAGE SIZE

400L

APPROVED WRAS MATERIAL

PRODUCT DATA

PHYSICAL PROPERTIES	
COLOUR	P Component is Clear to Amber C Component is Grey Mixed product is Grey
MIX RATIO BY VOLUME A : B	1 : 1
MIX RATIO BY WEIGHT A : B	1.12 : 1
% SOLIDS BY VOLUME	100
GEL TIME AT 60ºC (SECONDS)	5-20
WET FILM BUILD (MM)	As required, typically 1.5 mm in one coat

PERFORMANCE PROPERTIES	
TENSILE STRENGTH (MPA) BS6903 PART A2	20-25
ELONGATION (%)BS6903 PART A2	350-400
TEMPERATURE RESISTANCE (ºC)	Maximum 65ºC Dry
THEORETICAL COVERAGE	1.0 L/m²/mm dft
CURED HARDNESS (SHORE A) BS6903 PART A57	90-95
TEAR STRENGTH DIE C (KN/M)	60-70
ABRASION RESISTANCE (MM^3)	225-275

APPLICATION INFORMATION

SURFACE PREPARATION

Proper surface preparation is essential to achieve the full potential of the system. Consult the relevant method statement for the application / substrate in question.

Product should only be applied in conditions where the Temperature is >3ºC above the dew point and Relative Humidity is <85%.

MIXING

Product is hot spray applied and mixing is an essential part of the operation occurring within the gun. (See Application detail for further info).

APPLICATION

Prior to commencing use of the product ensure that the two components are stored at temperature no lower than 20ºC, a temperature of around 25ºC is preferable and can be achieved by storage in a heated room or electrical jacket heaters. The B component should be power mixed prior to use.

Suitable dispensing equipment is required in order to apply this product. Equipment must be capable of delivering product at ~ 120-170 bar, accurately metering the two components in a fixed 1 : 1 ratio by volume. The machine should have an output adequate to match the highest projected output from the gun to be used, typically a minimum of around 3.5L/minute. It must also be capable of controlling component temperatures independently along the length of the hoses up to the gun coupling block to around 70ºC.

The spray gun must use either high pressure impingementor or, where appropriate, static mixing to achieve satisfactory mixing of the components immediately on triggering, consult Irathanefutura to discuss suitable systems.

To achieve an even finish during application the gun should be held at right angles to the substrate at a distance of 30-70cm and multiply passes at 90º to one another are favoured to produce each coat. Exact distance can depend on pressures and gun output.

Review the appropriate method statement for detailed application instructions.

CURE

Cure times are quoted in the table below. For use in applications requiring WRAS approvals, 20 days at 7ºC minimum is the required cure to comply.

SUBSTRATE TEMPERATURE	10ºC	20ºC	30ºC
CURE WALK ON @ 1.5MM (MINUTES)	15	10	5
CURE LIGHT DUTY @ 1.5MM (HOURS)	6	4	2
CURE 80% @ 1.5MM (DAYS)	1	1	1
CURE 100% @ 1.5MM (DAYS)	5	4	3
RECOAT TIME MINIMUM (MINUTES)	5	4	3
MAXIMUM WITHOUT REACTIVATION (HOURS)	16	12	8
ABRADE, DEDUST + UU55 (HOURS)	>16	>12	>8

CLEAN UP

All equipment should be thoroughly cleaned directly after use using Messamol or suitable alternative.

SHELF LIFE & STORAGE

6 months from date of shipment when stored at room temperature (~22ºC) in original unopened containers in a dry environment.

PRECAUTIONS

For complete safety and handling information, please refer to Material Safety Data Sheets prior to using this product.

WARRANTY

ITW Performance Polymers will replace any material found to be defective. Because the storage, handling and application of this material is beyond our control we can accept no liability for the results obtained.

DISCLAIMER

All information on this data sheet is based on laboratory testing and is not intended for design purposes. ITW Performance Polymers makes no representations or warranties of any kind concerning this data.
For further product information or technical assistance please call +353 61 771 500.

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