Era Polymers Pty. Ltd.
25-27 Green Street, Banksmeadow
Sydney, NSW 2019
AUSTRALIA
www.erapol.com.au

Eraspray ST PW

POLYUREA SPRAY ELASTOMER
FOR POTABLE WATER

TECHNICAL DATASHEET

Eraspray ST PW is a two component, spray-in-place, solvent free, flexible and 100% solids polyurea elastomer system. It is formulated for spray application through plural component spray equipment.

Eraspray ST PW is a fast curing, textured surface, multipurpose material designed for commercial and industrial applications requiring high chemical resistance and abrasion resistance. This product is based on aromatic polyurea chemistry and will change colour with long term exposure to U.V.

Eraspray ST PW is certified in accordance with AS/NZS 4020 (Testing of products for use in contact with drinking water).

Application

Eraspray ST PW is ideally suited to sealing, protecting and waterproofing roofs, bunded areas, floors, tanks, pipes, concrete etc.

Eraspray ST PW can be used as a hard coat for protecting friable surfaces such as polyurethane foam and polystyrene, from outdoor exposure.

Product Specification

	ISOCYANATE PREPOLYMER (A)	POLYOL CURATIVE (B)
Viscosity at 40°C (cps)	180	150
Specific Gravity at 40°C	1.13	1.0
Appearance	Amber liquid	Amber liquid

CERTIFIED QUALITY MANAGEMENT SYSTEM ISO9001

This information is of general nature and is supplied without recommendation of guarantee. It does not make claim to be free from patent infringement. Properties shown are typical and do not imply specification tolerances. Era Polymers cannot accept liability for loss or damage through use. Whilst these technical details are based on expert knowledge, practical experience and laboratory testing, successful application depends upon the nature and conditions in which the products are supplied. Users must, by comprehensive testing, evaluate this product in their own application.

Mixing and Curing Conditions

Isocyanate Prepolymer (A)	(by volume)	100
Polyol Curative (B)	(by volume)	100
Mix time	(seconds)	3
Gel time	(seconds)	<5

Curing rate of this product is dependant on the ambient and surface temperatures. As the temperature increases, the curing time decreases. The product continues to cure overnight and it is advisable not to walk on it for 24 hours.

Physical Properties

		Eraspray ST PW	TEST METHOD
Hardness	(Shore A)	95	AS1683.15
Hardness	(Shore D)	45 - 50	AS1683.15
Tensile Strength	(MPa)	17.0	AS1683.11
Angle Tear Strength, Die C	(kN/m)	75	AS1683.12
Trouser Tear Strength	(kN/m)	30.0	AS1683.12
Elongation	(%)	175	AS1683.11
DIN Abrasion Resistance 10N	(mm^3)	165	AS1683.21
Cured Specific Gravity	(g/cm^3)	1.033	AS1683.4

This information is of general nature and is supplied without recommendation of guarantee. It does not make claim to be free from patent infringement. Properties shown are typical and do not imply specification tolerances. Era Polymers cannot accept liability for loss or damage through use. Whilst these technical details are based on expert knowledge, practical experience and laboratory testing, successful application depends upon the nature and conditions in which the products are supplied. Users must, by comprehensive testing, evaluate this product in their own application.

Processing Procedure

1. **Eraspray ST PW** components should be stored tightly closed at temperatures between 15°C and 25°C.

2. **Eraspray ST PW** must be sprayed through high pressure plural component dispensing equipment.

3. The component drums should be pre-heated to at least 25°C prior to mixing and dispensing.

4. **Eraspray ST PW** polyol should be mixed with a rotary power mixer before use.

Plural Component Processing Conditions:

Equipment pressure	2000 psi minimum
Component A (iso) Hose Temperature System Temperature	 60°C 60°C+
Component B (Polyol) Hose Temperature System Temperature	 60°C 60°C+

Surface Preparation

Substrates should be clean and dry. Avoid contact with water or moisture as it may react with the components and affect the finished results. A dryer should be installed in the air line to eliminate moisture.

Adhesion

Adhesion of Eraspray elastomers to various substrates is at best marginal if a primer is not used. Please consult Era Polymers for specific recommendations to improve adhesion.

This information is of general nature and is supplied without recommendation of guarantee. It does not make claim to be free from patent infringement. Properties shown are typical and do not imply specification tolerances. Era Polymers cannot accept liability for loss or damage through use. Whilst these technical details are based on expert knowledge, practical experience and laboratory testing, successful application depends upon the nature and conditions in which the products are supplied. Users must, by comprehensive testing, evaluate this product in their own application.

Chemical Resistance

MATERIAL	RESISTANCE
Acetic Acid (10%)	Excellent
Acetic Acid (concentrate)	Poor
Acetone	Poor
Alcohol	Excellent
Ammonium Hydroxide	Poor
Automotive Gasoline	Good
Automotive Oil	Excellent
Aviation J P Fuel	Excellent
Benzene	Good
Boric Acid	Excellent
Brine Solution	Excellent
Citric Acid (10%)	Excellent
Diesel Fuel	Good
Formic Acid (5%)	Excellent
Formic Acid (10%)	Poor
Hydrochloric Acid (5%)	Excellent
Hydrochloric Acid (45%)	Fair
Hydrogen Peroxide (10%)	Excellent
Kerosene	Excellent
Lactic Acid (10%)	Fair
Linseed Fatty Acid	Excellent
Nitric Acid (10%)	Excellent
Phosphoric Acid (50%)	Excellent
Potash Lye (20%)	Excellent

This information is of general nature and is supplied without recommendation of guarantee. It does not make claim to be free from patent infringement. Properties shown are typical and do not imply specification tolerances. Era Polymers cannot accept liability for loss or damage through use. Whilst these technical details are based on expert knowledge, practical experience and laboratory testing, successful application depends upon the nature and conditions in which the products are supplied. Users must, by comprehensive testing, evaluate this product in their own application.

Saline Solution (30%)	Excellent

Handling Precautions

Consult the product's material safety data sheet (MSDS) for specific hazard and handling information before use. All persons using the spray components and equipment should be fully trained in their use.

Eraspray ST PW should be used in well-ventilated area if possible. Avoid breathing in vapours and protect skin and eyes from contact. Provide additional ventilation and/or breathing apparatus if used in confined spaces, as required to maintain safe working conditions.

In case of skin contact, immediately remove excess, wash with soap and water. For eye contact, immediately flush with water for at least 15 minutes. Call a physician.

If nose, throat or lungs become irritated from breathing in vapours, remove exposed person to fresh air. Call a physician.

Wear appropriate personal protective equipment when servicing equipment.

This information is of general nature and is supplied without recommendation of guarantee. It does not make claim to be free from patent infringement. Properties shown are typical and do not imply specification tolerances. Era Polymers cannot accept liability for loss or damage through use. Whilst these technical details are based on expert knowledge, practical experience and laboratory testing, successful application depends upon the nature and conditions in which the products are supplied. Users must, by comprehensive testing, evaluate this product in their own application.