

TECHNICAL DATA SHEET

UREPAC[®] SPRAYCAST 10 95 (2321)

PRODUCT DESCRIPTION

UrePac[®] Spraycast 10 95 is a two component, hybrid polyurea spray elastomer comprising of a polyether polyol, amine chain extender and MDI based isocyanate. The system has been developed as a high wear protective coating for protection from abrasion and corrosion as well as a high performance waterproofing membrane.

PRODUCT FEATURES

- 1:1 v/v mix ratio
- Fast Reactivity
- Low viscosity
- Excellent abrasion resistance
- Mercury Free
- Low Shrinkage

UREPAC SPRAYCAST 10 95 (POLYOL) SPECIFICATION

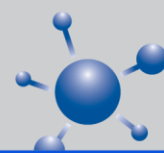
Appearance:	Clear pale amber liquid
Specific Gravity (22°C):	1.07 +- 0.02 g/ml
Viscosity (Brookfield) (22°C):	300 +- 100 mPa.s

Spindle 1 Speed 60

UREPAC 2321 (ISOCYANATE) SPECIFICATION

Appearance:	Clear Yellow liquid
Specific Gravity (22°C):	1.17 +- 0.02 g/ml
Viscosity (Brookfield) (22°C):	2,000 +- 400 mPa.s

Spindle 4 Speed 100



MIXED SYSTEM SPECIFICATION

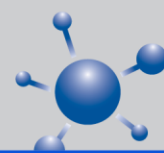
Mix Ratio:	By Weight	100 Polyol: 110 Isocyanate
	By Volume	100 Polyol: 100 Isocyanate

Test	Specification	Units
Gel Time (22°C):	10+-2	seconds
Cure Time (22°C):	10+-2	minutes

(Obtained from Laboratory 200g cup test, results will vary depending on mix quantities)

TYPICAL CURED ELASTOMER PROPERTIES

Test	Method	Specification
Hardness:	ASTM D1737	95+-5 Shore A
Solid Density (22°C)		1.10 g/ml
Tensile Strength	ASTM D412	30+-5 N/mm ²
Elongation	ASTM D412	275+-50%
Tear Strength	ASTM D624 (Die C)	75 N/mm
Taber Abrasion <i>H22 wheel 1kg per 1000 cycles</i>	ASTM D4060	30 mg loss
Potable Water (Certificate 208040 17.07.2017)	AS 4020:2005	Pass - Ratios up to 15,000mm ² /L exposure
Adhesion	Intercoat Concrete (Unprimed) Concrete (Primed) Steel (75µm shot blast)	1.50 MPa 1.20 MPa 2.40 MPa 3.40 MPa
Water Absorption	ASTM D471	< 1% @ 24 hours



After 7 days cure @ 22°C unless otherwise specified.

PACKAGING OPTIONS:

Packaging	UrePac Spraycast 10 95 Polyol	UrePac 2321 Isocyanate
20L Open Head Pail	20kg	22kg
60L Closed Head Drum	60kg	66kg
205L Closed Head Drum	200kg	220kg
1000L IBC	1000kg	1100kg

STORAGE

POLYOL should be stored in closed containers under dry conditions out of direct sunlight between 18 and 25°C.

ISOCYANATE should be stored separately from the polyol component, but under the same conditions.

Both products will have a minimum shelf life of six months when stored under these conditions.

CURED PRODUCT: Like all polyurethanes based on aromatic isocyanates this elastomer is **not** UV stable and will have surface discolouration and degradation if exposed to UV radiation and sunlight. Please speak to our technical consultants regarding your options if this product is required for use in external applications.

PROCESSING CONDITIONS:

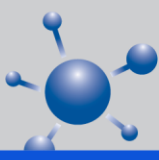
All processing conditions are given as a guide only, it is the responsibility of the customer to satisfy themselves that the product is suitable for their requirements by running closely monitored trials prior to production.

COMPONENT PREPARATION

POLYOL should be mixed each day prior to use as the components can separate out overnight. Please do not over mix as the aeration will reduce the physical properties of the resultant elastomer.

ISOCYANATE does not need to be mixed prior to use.

It is recommended that both components should be preconditioned to 22-25°C to ensure that the system will have consistent reactivity and performance, but the drums must be above 10°C before spraying.



MACHINE SETTINGS

Dynamic Spray Pressure: > 1200 psi

[Note: this is Gun type / setup / output dependant]

Primary Heater Temperatures: 50 - 65°C

[set both Component temperatures the same]

Hose Temperature: as per Primary Heater setting

SUBSTRATE/SURFACE PREPARATIONS

- the substrate temperature should be a minimum of 18°C to achieve good adhesion.
- Do not apply spray elastomer to damp substrates.
- Check the atmospheric conditions to ensure the temperature of the surface to which the product is to be applied is a minimum of 3°C above the Dew Point at the time of application.
- The product should not be applied in windy conditions due to potential application losses, possible contamination of surrounding areas / surfaces from wind-borne spray and the lack of application control resulting in variable applied thickness and surface evenness / irregularities.
- In internal application situations, protect surrounding surfaces from overspray.
- The product can be applied in temperatures of up to 35°C, so long as Dew Point conditions are met and the applied thickness and rate of application are controlled.
- Please discuss specific substrate bonding requirements with our technical consultants.

DISPOSAL

Liquid Systems: Liquid polyol or isocyanates should be disposed of with an EPA approved industrial waste company which meet all applicable federal, state and local laws and regulations.

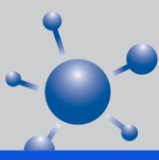
Cured Urethanes: Fully reacted and cured polyurethanes are inert and can be disposed of as regular landfill.

Container: Dispose of decontaminated drums in accordance with all applicable federal, state and local laws and regulations.

Do Not Re-use Empty Container.

Do Not Cut or Weld Empty Container.

WATER CONTAMINATION CAN CAUSES DANGEROUS PRESSURE BUILD UP IN ISOCYANATE DRUMS



DISCLAIMER

This information is given in good faith but without warranty and is supplied to users based on our general experience and, where applicable, on the results of tests on samples of typical manufacture. However, because of the many factors which are outside our knowledge and control that can affect the use of these products, it is imperative that the end user is satisfied that the material will meet their individual processing and performance requirements. Pacific Urethanes Pty Ltd cannot accept liability for any injury, loss or damage resulting from reliance upon this information.

All sales of this product shall be subject to Pacific Urethanes' Terms and Conditions of Sale. For a copy of these terms please contact us at info@pacificurethanes.com.

For additional information, consult the Material Safety Data Sheet for this product.

Revision Number: 02 (Format Change)

Revision Date: 26/04/2019

