

Pacific Urethanes Pty Ltd Operations Address 2 - 10 Produce Drive, Dandenong South, VIC 3175 Australia International +61 3 8779 0100 aus 1300 736 963 email info@pacificurethanes.com Web www.pacificurethanes.com



TECHNICAL DATA SHEET

UREPAC[®]RIGID 3 34FR(AUSFOAM 30)

PRODUCT DESCRIPTION

UrePac[®] Rigid 3 34FR (AUSFOAM 30) is a low-density rigid polyurethane Spray Foam system specifically formulated to provide a highly flame retarded foam system with a nominal 'applied' density of 38 kg/m³ depending on application parameters. It is formulated for use in commercial / industrial wall and ceiling insulation applications where the foam is applied into installed stud work / framed construction. It is to be installed according to the applicable Building Code of Australia regulations and design codes.

PRODUCT FEATURES

- Highly Fire Retardant
- Excellent Surface Finish
- > 1:1 mix ratio for standard Graco equipment

UREPAC RIGID 3 34FR (AUSFOAM 30) POLYOL SPECIFICATION

Δnr	าคลเ	ran	re.
App	Jea	all	ue.

Specific Gravity (22°C):

Clear pale straw liquid

Viscosity (Brookfield) (22°C): 300

Spindle 1 Speed 12

300 ± 50 mPa.s

1.10 ± 0.02 g/mL

UREPAC ISO2339 ISOCYANATE SPECIFICATION

Appearance:	Clear brown liquid
Specific Gravity (22°C):	1.23 ± 0.02 g/mL
Viscosity (Brookfield) (22°C):	170 ± 50 mPa.s

Spindle 1 Speed 50





MIXED SYSTEM SPECIFICATION

Mix	Ratio:

By Weight

By Volume

100 Polyol : 100 Isocyanate

100 Polyol : 110 Isocyanate

Test	Specification	Units
Cream Time (22°C): Time from when mixing commences till the liquid starts to expand.	3±1	seconds
String time (22°C): Time from when mixing commences till "strings can be pulled from the surface of the rising foam.	9±1	seconds
Rise time (22°C): Time from when mixing commences till the foam finishes expanding.	15 ± 1	seconds
Free Rise Density (22°C):	38 ± 2	kg/m ³
(Obtained from Laboratory 63g cup test, results will vary depending on mix quantities)		

TYPICAL CURED FOAM PROPERTIES

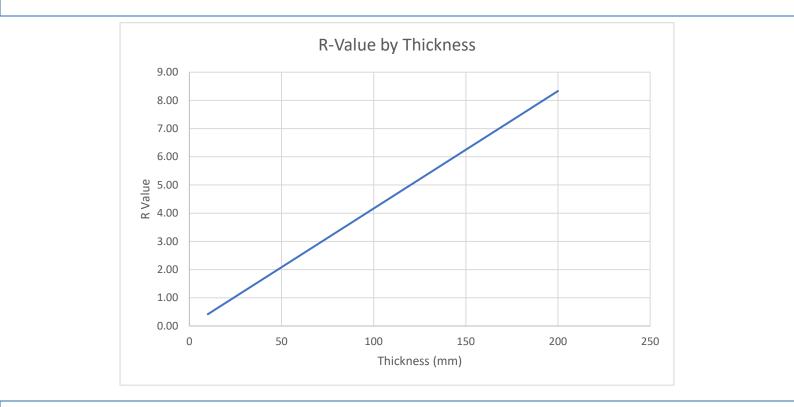
Test	Method	Specification
Core Density:	ASTM D1622	34 ± 2 kg/m3
Dimensional Stability (70°C)	±5% Volume (@ 24 hours)	Pass
Closed Cell Content:	ASTM D6226	>95%
Initial K Value:	ASTM C518	0.024 W/mK
R Value (@ 50mm)	Insulation thickness in meters divided by the K value	2.08
Compressive Strength:	ASTM D1621	150 ± 50 kPa
Fire Performance	AS3837* CSIRO Test FNK 9865	Group 2
	AS1530.3	Ignitability: 16
	AWTA Test 16-004550	Spread of Flame: 0
		Heat Evolved: 1 Smoke Developed: 5
		Smoke Developed. 5

After 7 days cure @ 22°C unless otherwise specified. * According to section 4.4 in AS5637, AS3837 is a suitable method for determining the Group Number for this product.





R VALUE



CONSUMPTION RATE







PACKAGING OPTIONS

Packaging	UrePac Rigid 3 34FR (AUSFOAM 30) Polyol	UrePac ISO2339 Isocyanate
205L Closed Head Drum	230kg	250kg
1000L IBC	1150kg	1250kg

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 foam 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 our UV stable coating 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 or recirculated each day prior to use as the components may separate.

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 - 55°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 foam adhesion and effective product yield.
- > Do not apply spray foam insulation 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.
- In specific temperature and humidity conditions the effects of water vapour 'drive' must be considered in system design and application requirements. This is also important under possible water vapour condensation temperature / humidity conditions.
- When spraying or pouring, excessive thickness should not be applied as the exotherm of the reaction may lead to spontaneous combustion, excessive pressure build up or thermal expansion from the significant heat developed in the foaming reaction.

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 <u>info@pacificurethanes.com</u>.

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

Revision Number: 04 (Pack size Change)

Revision Date: 14/07/2022

