

Pacific Urethanes Pty Ltd

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TECHNICAL DATA SHEET

UREPAC® FLEX 22 390

PRODUCT DESCRIPTION

UrePac® Flex 22 390 is a two component, polyurethane integral skin foam comprising of a polyether polyol and MDI based isocyanate. The system has been developed to be RIM moulded, and will produce a high resilience foam with a tough elastomeric skin for applications such as automotive bumper bars.

PRODUCT FEATURES

- > 100% Water blown
- Excellent Skin Definition
- Excellent physical properties

UREPAC FLEX 22 390 (POLYOL) SPECIFICATION

Appearance: Black liquid

Specific Gravity (22°C): $1.04 \pm 0.02 \text{ g/ml}$

Viscosity (Brookfield) (22°C): 800 ± 100 mPa.s

Spindle 3 Speed 100

UREPAC 2104 (ISOCYANATE) SPECIFICATION

Appearance: Clear Amber liquid

Specific Gravity (22°C): $1.21 \pm 0.02 \text{ g/ml}$

Viscosity (Brookfield) (22°C): 150 ± 50 mPa.s

Spindle 1 Speed 60





MIXED SYSTEM SPECIFICATION

Mix Ratio: By Weight 100 Polyol: 60 Isocyanate

Test	Specification	Units
Cream Time (22°C): Time from when mixing commences till the liquid starts to expand.	22 ± 3	seconds
String time (22°C): Time from when mixing commences till "strings can be pulled from the surface of the rising foam.	33 ± 3	seconds
Rise time (22°C): Time from when mixing commences till the foam finishes expanding.	43 ± 5	seconds
Free Rise Density (22°C):	390 ± 20	Kg/m³

(Obtained from Laboratory 120g cup test, results will vary depending on mix quantities)

TYPICAL CURED FOAM PROPERTIES

Test	Method	Specification
Moulded Density :	ASTM D1622	420 ± 20 kg/m ³
Tensile Strength	ASTM D3574	350 ± 10 N/cm ²
Elongation	ASTM D3574	100 ± 10 %
Tear Strength:	ASTM D3574	150 ± 10 N/cm
Skin Hardness	ASTM D2240	85+-5Á

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





PACKAGING OPTIONS:

Packaging	UrePac Rigid 22 390 Polyol	UrePac 2104 Isocyanate
205L Closed Head Drum	210kg	240kg
1000L IBC	1050kg	1200kg

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 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. If this component is held in day tanks they should be continuously agitated to prevent any separation during production.

ISOCYANATE does not need to be mixed prior to use.

Both Components should be preconditioned to 22-25°C to ensure that the components will have consistent reactivity and performance. If processing in a machine this usually requires recirculation for at least an hour prior to production commencing.

MOULD TEMPERATURES

Mould temperatures should be conditioned to 55-65°C to ensure optimal skin definition and demould times for this product.





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.

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