

TECHNICAL DATA SHEET

UREPAC® CAST 450 85

PRODUCT DESCRIPTION

UrePac® Cast 450 85 is a two component, polyurethane cast elastomer comprising of a polyether polyol (PPG) and MDI based isocyanate. The system has been developed with medium performance and a long pot-life for general purpose applications.

PRODUCT FEATURES

- TDI, mercury and MBOCA free
- Low viscosity
- Low Shrinkage
- 1:1 w/w mix ratio

UREPAC CAST 450 85 (POLYOL) SPECIFICATION

| | |
|--------------------------------|--------------------|
| Appearance: | Pale amber liquid |
| Specific Gravity (22°C): | 1.04 +- 0.01 g/ml |
| Viscosity (Brookfield) (22°C): | 1,300 +- 200 mPa.s |

Spindle 3 Speed 100

UREPAC 2312 (ISOCYANATE) SPECIFICATION

| | |
|--------------------------------|----------------------|
| Appearance: | Pale Yellow liquid |
| Specific Gravity (22°C): | 1.10 +- 0.02 g/ml |
| Viscosity (Brookfield) (22°C): | 4,000 +- 2,000 mPa.s |

Spindle 4 Speed 20



MIXED SYSTEM SPECIFICATION

| | | |
|-------------------|-----------|----------------------------|
| Mix Ratio: | By Weight | 100 Polyol: 100 Isocyanate |
| | By Volume | 100 Polyol: 95 Isocyanate |

| Test | Specification | Units |
|--------------------------------|---------------|---------|
| Gel Time (22°C): | 450+30 | seconds |
| Cure Time (Mould 60°C): | 30+5 | minutes |

(Obtained from Laboratory 118g cup test, results will vary depending on mix quantities)

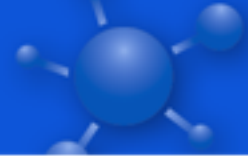
TYPICAL CURED ELASTOMER PROPERTIES

| Test | Method | Specification |
|-----------------------------|------------|---------------|
| Hardness: | ASTM D1737 | 85+5 Shore A |
| Solid Density (22°C) | | 1.10 g/ml |
| Service Temperature | | -20°C – 80°C |

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

PACKAGING OPTIONS

| Packaging | UrePac Cast 450 85 Polyol | UrePac 2312 Isocyanate |
|------------------------------|---------------------------|------------------------|
| 20L Pails | 20kg | 22kg |
| 60L Drums | 60kg | 66kg |
| 205L Closed Head Drum | 210kg | 220kg |
| 1000L IBC | 1050kg | 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.

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.

PROCESSING CONDITIONS

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. 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.

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. We recommend vacuum degassing of the polyol and isocyanate for optimal physical properties.

MOULD TEMPERATURES

Mould temperatures should be conditioned to 60-80°C to ensure optimal demould times and quality for this product.

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.



DISPOSAL

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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