



## PRODUCT DATA SHEET

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### UrePac® Rigid 6 9

#### **Product Description**

UrePac® Rigid 6 9 is a rapid cure, two component polyurethane spray foam based on polyether polyol and MDI isocyanate. The system has been developed with low viscosity so it can be sprayed through low and high pressure equipment. The foam was designed for use as an ultra low density insulation foam.

#### **Part A (Polyol) Specification:**

210kg per 205lt Open top drum.

<b>Specific Gravity (22°C):</b>	1.04 +- 0.02 g/ml
<b>Viscosity (Brookfield) (22°C):</b>	400 +- 100 m.Pas
<b>Appearance:</b>	Clear colourless liquid

#### **Part B (Isocyanate) Specification:**

250kg per 205lt Closed top drum.

<b>Specific Gravity (22°C):</b>	1.23 +- 0.02 g/ml
<b>Viscosity (Brookfield) (22°C):</b>	210 +- 70 m.Pas
<b>Appearance:</b>	Clear Brown liquid

#### **Processing Conditions:**

##### **Temperature**

The temperature of both components should be heated in the spray unit to at least 45°C to ensure that a sufficient mix and reaction is obtained. The surface to be coated should be at least 22°C to ensure adequate adhesion and reaction of the product can occur.

##### **Application**

The surface to be sprayed should be clean, dry and free from oil and grease to prevent delamination. For improved adhesion a suitable primer should be used to prepare the surface. It is recommended that regular calibration shots are conducted to ensure that the correct mix ratio is being achieved. For high pressure units a minimum pressure of 1500psi is required to get sufficient mixing of the components.

## Cured Foam Properties

**Mix Ratio** 100 Polyol (Part A): 110 Isocyanate (Part B) (w/w)  
100 Isocyanate: 100 Polyol (v/v)

**Cream Time (22°C):** 6+-1 seconds  
**String time (22°C):** 15+-1 seconds  
**Rise time (22°C):** 22+-2 seconds  
**Free Rise Density (22°C):** 15+-2 Kg/m<sup>3</sup>

Obtained from Laboratory cup test

**Core Density (Sprayed):** 9+-1 Kg/m<sup>3</sup>  
**Closed Cell Content:** 10-30%  
**K Value:** 0.0360+-0.02 W/mK  
**Compressive Strength:** 30+-10 KPa

### **Fire Performance:**

**UrePac® Rigid 6 9** will pass **Fire Test AS 1530.3** which is commonly used to assess early fire hazard of materials used under the **Australian Building Code** in Domestic and Residential buildings.

### **Laboratory Horizontal Burning Test:**

**Burn Time (sec):** Self-Extinguishes  
**Length of Burn (mm):** 25  
**Rate of Burn (mm/sec):** N/A

Sprayed through Graco E10

## Storage and Handling

**Component A** should be stored under dry conditions out of direct sunlight between 18 and 25°C.  
**Component B** should be stored separately from *Component A*, but under the same conditions.

- Both products will have a minimum shelf life of six months when stored under these conditions.
- It is recommended that **Component A** be mixed prior to use.
- If **Component A** is held in storage tanks, the contents must be mixed at least once per day.

Please refer to the Material Safety Data Sheet (MSDS) for further advice on the safe handling of these products.

## Transport Classification

**Component A:** None  
**Component B:** None



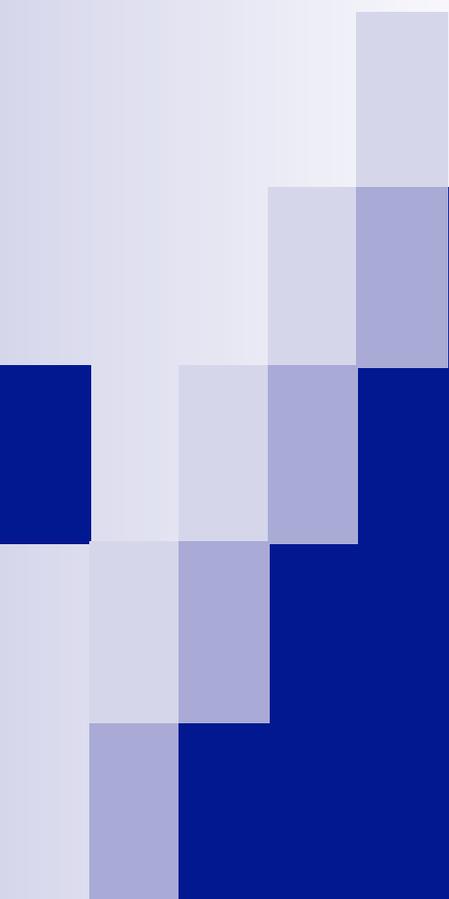


**UREPAC® RIGID 6 9**  
**OPEN CELL POLYURETHANE**  
**FORMED-IN-SITU SPRAY FOAM**  
**ONE-STEP THERMAL INSULATION AND**  
**AIR SEALING SOLUTION**

**UREPAC® RIGID 6 9:**  
**A 2 COMPONENT OPEN-CELL POUR FOAM SYSTEM**  
**FULLY WATER-BLOWN**

**BENEFITS INCLUDE:**

- LOW DENSITY – OVERALL LESS THAN 20 KG/M<sup>3</sup>**
- ELIMINATION OF AIR INFILTRATION**



**UREPAC® RIGID 6 9**  
**COMPLIES WITH AS/NZS 4859.1**  
**“MATERIALS FOR THE THERMAL**  
**INSULATION OF BUILDINGS”**

## **TYPICAL PROPERTIES**

Foam Core Density:	15Kg/M <sup>3</sup>
Initial K Value:	0.038 +/- 0.002 W/mK
R Value (Aged/100mm):	2.63
Compressive Strength:	30 kPa
Closed Cell Content:	20%

## **UREPAC® RIGID 6 9**

was designed for use as ultra-low density insulation foam for use in building insulation applications, primarily to provide an air seal. With the added benefits of thermal and acoustic insulation.

### **Benefits**

Urepac® Rigid 6 9 provides

- Elimination of Air infiltration
- Superior insulation performance with an airtight envelope
- A draught-free environment keeping air-pollutants out
- Conditions for more efficient operation of heating, air-conditioning and ventilation systems.
- Effective sound insulation



**UREPAC® RIGID 6 9**  
**FIRE PERFORMANCE:**  
**WILL MEET BCA REQUIREMENT FOR**  
**INSULATION MATERIALS: AS 1530.1**

- Like all organic materials, Polyurethanes are combustible and are therefore consumed by flame. However they will not sustain flame once the source of the flame is removed. Being a thermoset product, Polyurethane foam will not melt or drip and leaves a charred residue on contact with a flame. Intense ignition sources such as welding and cutting equipment must not be used in contact with or in close proximity to any Polyurethane foam.



## **UREPAC® RIGID 6 9**

### **WATER ABSORPTION**

### **WATER VAPOUR TRANSMISSION**

**BECAUSE UREPAC® RIGID 6 9 IS OPEN-CELLED, UNDER PRESSURE WATER CAN BE FORCED INTO THE FOAM CELLS. THIS PROCESS WILL REVERSE GIVEN SUITABLE DRYING CONDITIONS AND THE EFFECTS OF GRAVITY.**

**ONCE DRY THE FOAM EXHIBITS ORIGINAL PHYSICAL PROPERTIES.**

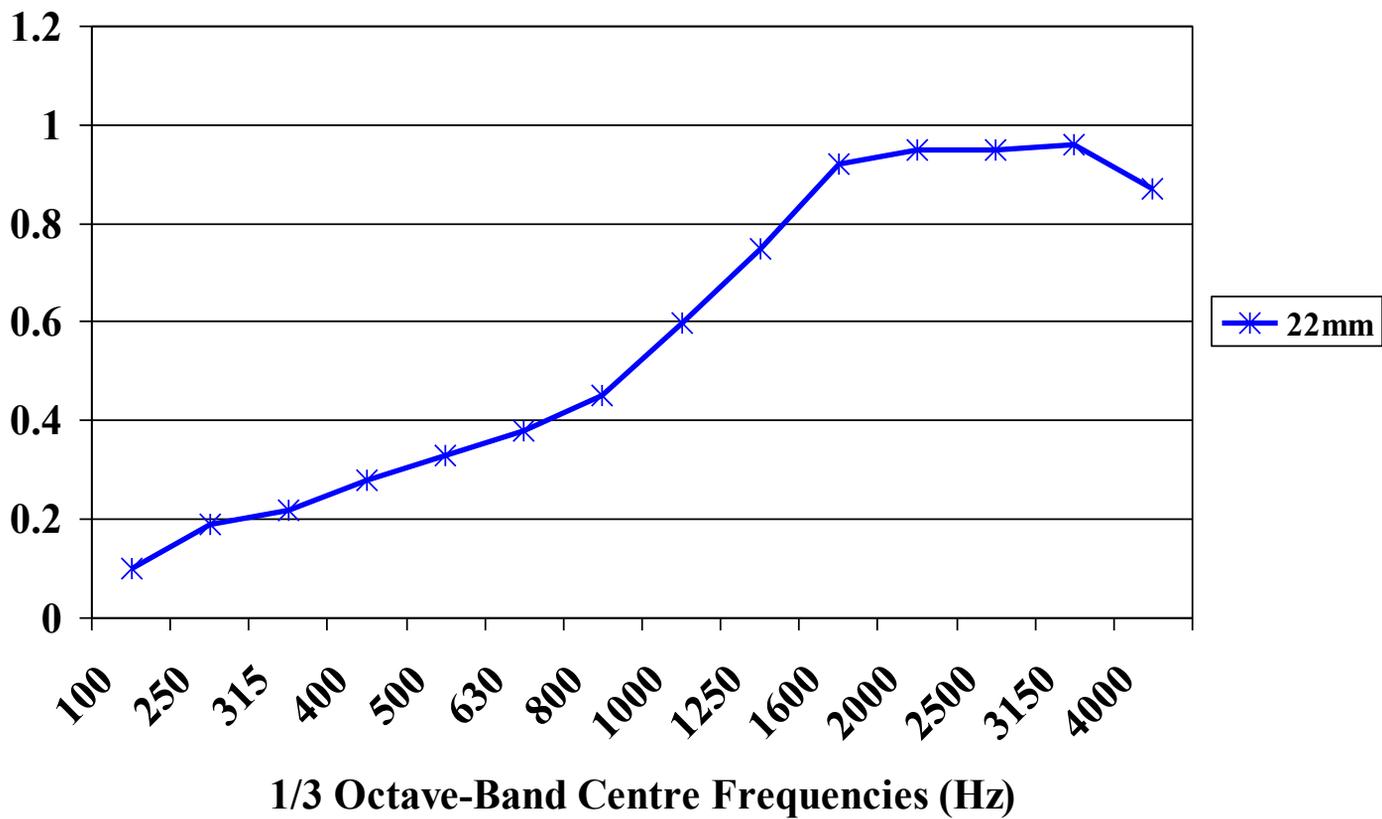
**UREPAC® RIGID 6 9 IS WATER VAPOUR PERMEABLE AND MOISTURE CAN DIFFUSE THROUGH CELLS. IF THIS IS UNACCEPTABLE VAPOUR BARRIERS ARE INSTALLED**



**UREPAC® RIGID 6 9  
ACOUSTIC ABSORPTION  
CHARACTERISTICS**

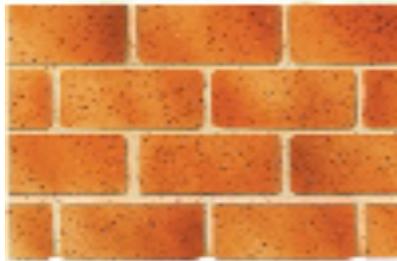
**BECAUSE UREPAC® RIGID 6 9 IS OPEN-CELLED IT EXHIBITS  
EXCELLENT SOUND INSULATION PROPERTIES**

## Acoustic Absorption Curve for UrePac 6 9

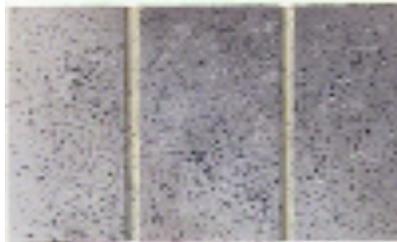


# COMPARATIVE INSULATION PERFORMANCE

1720mm Brick



760mm Concrete Block



280mm Softwood



100mm Cork



90mm Mineral Wool  
90mm Open Cell Polyurethane  
80mm Polystyrene



50mm Closed Cell Polyurethane





## **UREPAC® RIGID 6 9**

**INFORMATION HERE IS PROVIDED TO  
HELP CUSTOMERS DETERMINE ITS  
SUITABILITY FOR THEIR APPLICATION.**

### **UREPAC® RIGID 6 9:**

**SHOULD ONLY BE APPLIED BY PROFESSIONAL EXPERIENCED CONTRACTORS . THE INFORMATION PROVIDED HERE IS DONE SO ON THE BASIS THAT THE MATERIALS WILL BE APPLIED ACCORDING TO GUIDELINES ON STORAGE, HANDLING & SAFETY PROVIDED BY PACIFIC URETHANES. FURTHER WARRANTY INFORMATION CAN BE FOUND ON THE PRODUCT DATA SHEET PROVIDED TO THE APPLICATOR.**