

PURL GP-42

Polyurethane General Purpose Foam

PRODUCT DESCRIPTION PURL GP-42 is a low density rigid polyurethane foam system designed to provide a slow-reacting foam for hand mix or machine-dispensed pour or injection with a free rise density of 43 kg/m³.

INTEND USES Commercial and industrial insulation and void filling applications, including pipe in pipe where the foam is hand mixed or machine dispensed.

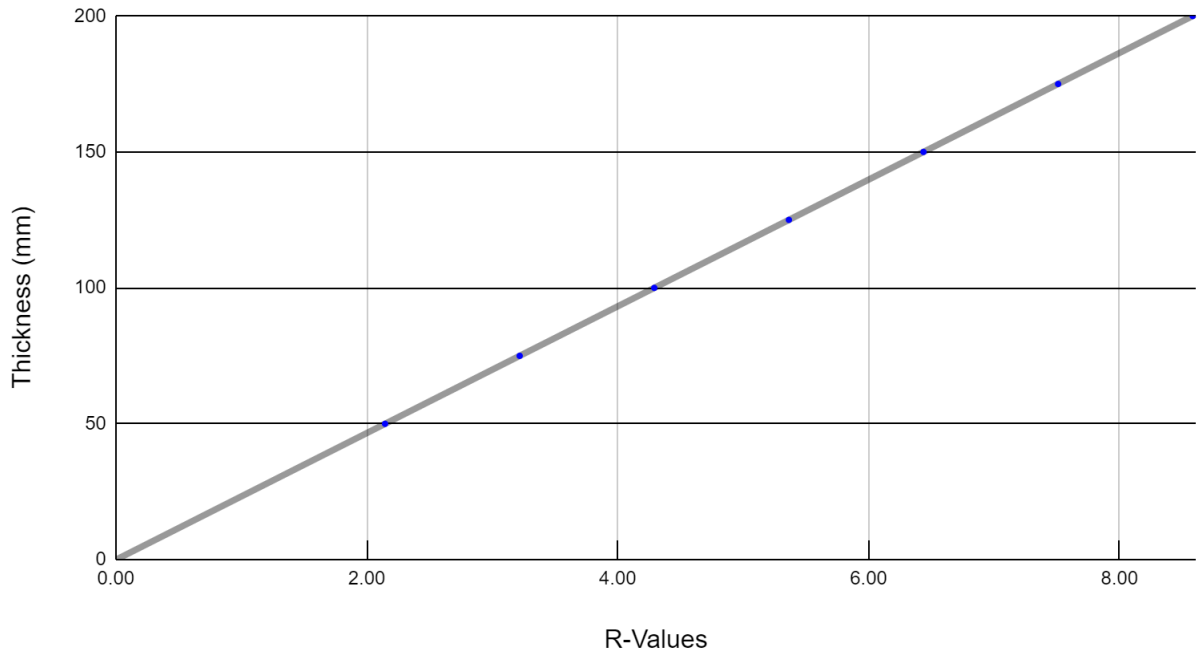
- FEATURES**
- Formulated with zero Ozone Depleting Potential
 - Excellent insulation properties for temperatures ranging from -30°C to 85°C
 - Low weight and high stiffness

| PRODUCT DATA | Purl Part A | | PURL GP-42 Part B | |
|-------------------------|-------------|-------------------------|-------------------|--------|
| | Appearance | Brown | Appearance | Yellow |
| Specific Gravity (25°C) | 1.23 g/mL | Specific Gravity (20°C) | 1.14 g/mL | |
| Viscosity Cps (25°C) | 225 mPa.s | Viscosity Cps (20°C) | 630 mPa.s | |

| | | |
|--------------------|-------------------|----------------------|
| MIXED PRODUCT DATA | Mix Ratio | 1:1 |
| | Cream Time | 45 Seconds |
| | Rise Time | 360 Seconds |
| | Free Rise Density | 43 kg/m ³ |

| TYPICAL CURED PROPERTIES | Test | Method | Result |
|--------------------------|--------------------------------------------------------------------------|-------------------------------------------------------|----------------------|
| | Core Density | ASTM D1622 | 43 kg/m ³ |
| | 10% Compressive strength - AS2498.3 perpendicular (50kg/m ³) | | 300 kPa |
| | Dimensional Stability | D2126-66 | |
| | 14 days @ -30°C | | - 0.33% |
| | 14 days @ 70°C with 100% humidity | | - 0.44% |
| | 14 days @ 100°C | | - 0.82% |
| | Closed Cell Content | ASTM D6226 | > 95% |
| | Thermal Conductivity (K Value) | ASTM C518 | 0.023 W/mK |
| | R Value (@ 50mm) | Insulation thickness in meters divided by the K value | 2.17 |
| | VOC emissions "Greenstar" limit = 0.5mg/m ² /hr | CETEC - D5116 | 0.01 over 24 hrs |

PURL GP-42 R-Values at different Thickness



| R-Values | Thickness |
|----------|-----------|
| 1.29 | 30 |
| 2.15 | 50 |
| 3.22 | 75 |
| 4.29 | 100 |
| 5.36 | 125 |
| 6.44 | 150 |
| 7.51 | 175 |

EQUIPMENT SETTINGS

| | |
|------------------------|--------------------------------------|
| Graco Equipment | Graco E-30 and AP Fusion Gun or GX7a |
| Dynamic Spray Pressure | > 1500 psi |
| Operating temperatures | 25 - 40°C |

PROCESS CONDITIONS

- The Isocyanate (Part A) and Polyol (Part B) do 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 Graco reactor, this is usually an hour before commencing application.

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LIMITATIONS

- Purl GP-42 is based on aromatic isocyanates and is not UV colour stable. The surface will have discolouration and degradation if exposed to UV radiation or sunlight. Please speak with the technical department regarding options if the Purl GP-42 is required for external applications that allow UV exposure.

STORAGE

Store in dry, shaded conditions away from heat and ignition sources and in properly sealed containers. Protect from heat and frost. Protect contents from moisture. A shelf life of 6 months minimum is typical with unopened containers if stored at ambient conditions at 25°C. If either component is opened and partially used, it should be purged with nitrogen or desiccated air and resealed.

Purl GP-42 Part B contains HFC, which has a boiling point of 15°C. Storage at elevated temperatures will result in the build-up within the drums. For this reason, the product should be stored away from direct sunlight.

PACK SIZE

400L Kit
PU074 Purl Iso Part A 200L - 250Kg
PU097 Purl GP-42 Part B 200L - 220Kg

40L Kit
PU074 Purl Iso Part A 20L - 25Kg
PU097 Purl GP-42 Part B 20L - 22Kg

DISPOSAL

Liquid Systems: Liquid Ployol or isocyanate should be disposed of with an EPA-approved industrial waste company that meets all applicable federal, state and local laws and regulations.

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

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

Do not reuse empty containers.

HEALTH & SAFETY

Water contamination can cause dangerous pressure build-up in isocyanate drums. Storage at elevated temperatures will result in the build-up of pressure. Caution must be taken when opening containers to slowly release the pressure. Please download the most recent SDS from www.liquimix.com and read the Liquimix SDS prior to using Liquimix products.

NOTICE

The information contained herein is offered without charge and is for use by technically qualified personnel at their own risk. All statements, technical information and recommendations contained herein are based on tests and data which we believe to be reliable, but the accuracy or completeness thereof is not guaranteed, and no warranty of any kind is made with respect thereto.