

Mencool 21041966

Application

Rigid foam system for the insulation of refrigerators and freezers etc.

Application Conditions

| | Unit | Polyol | Comp. B |
|-------------------------------|------|--------|---------|
| Tank temperatures | °C | 20 | 40 |
| Recommended Mold Temperatures | °C | 50 | |

Chemical Characteristics

| | | |
|------------------|--|--------|
| Polyol Component | branched polyether | PP34 |
| B Component | polymeric diphenylmethane diisocyanate | PB 05 |
| C Component | blowing agent hydrocarbon | BA 123 |

Storage and Preparation

Polyurethane components are moisture sensitive. Therefore they must be stored at all times in sealed, closed containers. More detailed information should be obtained from the separate data sheet entitled "Information for in-coming material control, storage, material preparation and waste disposal" and from the component data.

Possible Hazards

The B-component (Isocyanate) irritates the eyes, respiratory organs and the skin. Sensitisation is possible through inhalation and skin contact. PMDI is harmful by inhalation. On processing these, take note of the necessary precautionary measures described in the Material Safety Data Sheets (SDSs). This applies also for the possible dangers in using the A-component (Polyol) as well as any other components. See also our separate information sheet " Safety- and Precautionary Measures for the Processing of Polyurethane Systems." Use our Training Programme " Safe Handling of Isocyanate."

Waste Disposal

More detailed information is provided in our country -specific pamphlet.

The information provided herein is, to the best of our current knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control and there are many factors effecting application and processing of our product, we make no guarantee of results, and assume no liability for damages incurred by following these suggestions and using our products. We strongly recommend processors to carry out their own tests and investigations.

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| Component Data | | | | | | |
|-------------------|-------------------|--------|----------|---------|---------|-------------------|
| | Unit | Polyol | Comp. A* | Comp. B | Comp. C | Method |
| Density (20 °C) | g/cm ³ | 1.06 | 1.05 | 1.07 | 1.3 | G 133-08 |
| Viscosity (25 °C) | mPa.s | 7000 | 500 | 800 | - | G 133-07 |
| Hydroxyl Number | mg KOH/g | 400 | - | - | - | G 133-01 |
| Water content | % | 3 | - | - | - | G 133-03 |
| Free NCO Content | % | - | - | 30 | - | G 133-06 |
| Shelf Life | day | 180 | 90 | 180 | - | AA S-10-03 22.011 |

* find below basic formulation for A-Comp.

Basic Formulation for A-Comp.

Cup Test by ultrasonic method:

| | Unit | Value | Method |
|---|-------------------|--|----------|
| Guide formulation | A-component | 100.0 pbw polyol-component Mencool 21041966 pbw blowing agent cyclo-pentane (≥ 95 %) | |
| | B-component | 140.0 pbw isocyanate | |
| Component temperature | °C | 20 | - |
| Quantity | g | A = 29 B = 37 | - |
| Mixing ratio | - | A : B = 100 : 130 | - |
| Stirring time | s | 5 | - |
| Cream time | s | 15 | G 132-05 |
| String time (hypothetical) | s | 70 | G 132-05 |
| Free rise density | s | 150 | G 132-05 |
| Rise time | kg/m ³ | 35 | G 132-05 |
| Reaction parameters by means of high pressure machine (p = 150 bar). | | | |
| Cream time | s | 6 | - |
| String time | s | 55 | - |
| Free rise density | kg/m ³ | 25 | - |

Typical Physical Properties

| | Unit | Measured Value | Method |
|--|-------------------|----------------|----------------|
| Specimen produced by means of high pressure machine (p = 150 bar). | | | |
| Density / core | g/cm ³ | 40 | DIN EN ISO 845 |
| Compressive strength | N/mm ² | 0.2 | DIN 53 421 |
| Thermal conductivity | mW/m·K | 21 | DIN EN 12667 |
| Closed cells | % | 100 | ISO 4590 |

The values given in reaction profile section are the values obtained in the laboratory, using a mixer with 5000 rpm stirring rate.

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