20-2362 FR
FLAME RETARDANT POLYURETHANE
POTTING & ENCAPSULATING COMPOUND
UL 94 V-0 Listed

DESCRIPTION:
The 20-2362FR potting and encapsulating compound has been formulated to meet the stringent non-burning requirements of UL 94 V-0. 20-2362FR is listed with Underwriter’s Laboratory for passing UL 94 V-0. This system offers a unique combination of properties. 20-2362 is very low in viscosity, flame retardant, has a glass transition temperature of -72°C, and has low moisture permeability. This product forms a soft elastomer that will cushion and protect sensitive electronic components.

FEATURES:
Flame Retardant - UL 94 V-0 listed
Low Viscosity
Low Durometer
Low Shrinkage & Exotherm
Excellent Moisture Resistance
Maintains Flexibility at Low Temperatures
RoHS and REACH compliant

BENEFITS:
May be used in applications requiring FR
Quick self-leveling around components
Low stress on components & vibration resistance
Will not damage components during cure
Will not absorb H₂O and can be used in wet environments
Can be used in very cold environments
Finished products are export compliant

TYPICAL PROPERTIES:
Color
Black
Specific gravity, @ 25°C
Polyol
1.21
Isocyanate
1.24
Mix ratio, by weight mixed (P:I)
100:22
Hardness, Shore A
90
Pot life, 100 gram mass, 25°C
20 minutes
Viscosity, 25°C, cps
Resin
7,500
Catalyst
315
Mixed
2,500
Coefficient of thermal expansion, per °C
2.28 x 10⁻⁴
Tensile strength, psi
400
Elongation, %
40
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass transition temperature, °C</td>
<td>-72</td>
</tr>
<tr>
<td>Dielectric constant, 25°C, 1 KHz</td>
<td>4.5</td>
</tr>
<tr>
<td>Surface resistivity, 25°C, ohm</td>
<td>$1 \times 10^{16}$</td>
</tr>
<tr>
<td>Volume resistivity, ohm-cm</td>
<td>$6 \times 10^{16}$</td>
</tr>
<tr>
<td>Operating temperature range, °C</td>
<td>-40 to +125</td>
</tr>
</tbody>
</table>

**INSTRUCTIONS FOR USE:**

1. Settling of fillers may occur. Mix polyol before using.
2. By weight, thoroughly mix 22 parts 20-2362 I (Isocyanate) to 100 parts 20-2362 P (Polyol). Two components should be carefully weighed in metal, plastic, or glass containers. Avoid using paper cups and wooden stirrers.
3. Mixed material can be degassed at 1 to 5 mm Hg to ensure bubble free castings. Containers should be large enough to allow frothing.
4. Cure according to one of the following cure schedules:
   - 25°C 24 Hours
   - 65°C 2 Hours
   - 80°C 60 Minutes

Note: When cured at room temperature, full hardness and final properties are achieved in 7-10 days.

**STORAGE & HANDLING & SAFETY:**

Store both components at 75-85F in original containers. If the containers are opened and the contents partially used, the material left in the container should be blanketed with dry nitrogen before sealing. Carefully read Material Safety Data Sheets before using.

**IMPORTANT:**

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