PARALOID™ EXL-2655 Impact Modifier
For Thermoset Applications

Regional Product Availability
Asia-Pacific

Description
PARALOID™ EXL-2655 Impact Modifier is an MBS core-shell modifier designed to improve fatigue and impact resistance for thermosetting plastics, such as epoxy molding compounds.

Benefits
- Excellent dispersibility
  - Porous powder
  - Small particle size and sharp distribution
  - Low swelling
- Excellent purity
  - Lower impurity level than other MBS resins
  - Suitable for semiconductor encapsulant
- Easy to handle
  - Excellent flow
  - Less blocking
  - Less dusty

Typical Properties
These properties are typical but do not constitute specifications.

<table>
<thead>
<tr>
<th>Property</th>
<th>Typical Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White powder</td>
</tr>
<tr>
<td>Bulk density</td>
<td>0.35 ± 0.10 g/m.</td>
</tr>
<tr>
<td>Volatile matter</td>
<td>≤ 1.0%</td>
</tr>
<tr>
<td>Cl ion</td>
<td>≤ 40 ppm</td>
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<tr>
<td>Na ion</td>
<td>≤ 40 ppm</td>
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</tbody>
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Packaging
PARALOID™ EXL-2655 Impact Modifier is supplied in 20 kg paper bags.

Effect
Epoxy resin: Bisphenol A Type
Curing Agent: Triethylenetetramine 13 phr
Curing condition: 100°C / 30 min
**Tensile Elongation at Break**

![Graph showing tensile elongation at break](image)

**Impact Strength**

![Graph showing impact strength](image)

**C Glass Transition Temperature and Coefficient of Thermal Expansion (CTE)**

<table>
<thead>
<tr>
<th></th>
<th>Dosage</th>
<th></th>
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<tbody>
<tr>
<td></td>
<td>0</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Tg (°C)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXL-2655</td>
<td>116</td>
<td>114</td>
<td>112</td>
</tr>
<tr>
<td>CTBN</td>
<td>116</td>
<td>113</td>
<td>110</td>
</tr>
</tbody>
</table>

**Coefficient of Thermal Expansion (CTE)**

<table>
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<tr>
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<tbody>
<tr>
<td></td>
<td>0</td>
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<tr>
<td>a₁ (*E⁻⁴ / °C)</td>
<td>EXL-2655</td>
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</table>
Handling Precautions

Before using this product, consult the Material Safety Data Sheet (MSDS)/Safety Data Sheet (SDS) for details on product hazards, recommended handling precautions and product storage.

**CAUTION!** Keep combustible and/or flammable products and their vapors away from heat, sparks, flames and other sources of ignition including static discharge. Processing or operating at temperatures near or above product flashpoint may pose a fire hazard. Use appropriate grounding and bonding techniques to manage static discharge hazards.

**CAUTION!** Failure to maintain proper volume level when using immersion heaters can expose tank and solution to excessive heat resulting in a possible combustion hazard, particularly when plastic tanks are used.

Storage

Store products in tightly closed original containers at temperatures recommended on the product label.

Disposal Considerations

Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.

It is the user's responsibility to verify that treatment and disposal procedures comply with local, state (provincial) and federal regulations. Contact your Dow Plastics Additives Technical Representative for more information.

Chemical Registration

Many countries within the Asia-Pacific require the registration of chemicals, either imported or produced locally, prior to their commercial use. Violation of these regulations may lead to substantial penalties imposed upon the user, the importer or manufacturer, and/or cessation of supply. It is in your interests to ensure that all chemicals used by you are registered. The Dow Chemical Company does not supply unregistered products unless permitted under limited sampling procedures as a precursor to registration.

Note on Asia-Pacific Product Line

Product availability and grades vary throughout the countries in Asia-Pacific. Please contact your local Dow representative for further information and samples.

Product Stewardship

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b) Use in cardiac prosthetic devices regardless of the length of time involved ("cardiac prosthetic devices" include, but are not limited to, pacemaker leads and devices, artificial hearts, heart valves, intra-aortic balloons and control systems, and ventricular bypass-assisted devices);

c) Use as a critical component in medical devices that support or sustain human life; or

d) Use specifically by pregnant women in applications designed specifically to promote or interfere with human reproduction.

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