Kraton® G1657 M Polymer

Identifier : K131DDj09U

**Description**

Kraton G1657 M is a clear, linear triblock copolymer based on styrene and ethylene/butylene with a polystyrene content of 13%. It is supplied from North America in the physical form identified below.

- Kraton G1657 MS - supplied as a dusted pellet

Kraton G1657 M is used as a modifier of bitumen or thermoplastics and in compound formulations. It may also find use as an ingredient in formulating adhesives, sealants and coatings.

**Sales Specifications**

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Units</th>
<th>Sales Specification Range</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polystyrene Content</td>
<td>KM 03</td>
<td>%m</td>
<td>12.3 TO 14.3</td>
<td>b</td>
</tr>
<tr>
<td>Antioxidant</td>
<td>KM 08</td>
<td>%m</td>
<td>0.03 TO 0.10</td>
<td>a</td>
</tr>
<tr>
<td>Total Extractables</td>
<td>KM 05</td>
<td>%m</td>
<td>&lt;= 1.5</td>
<td></td>
</tr>
<tr>
<td>Volatile Matter</td>
<td>KM 04</td>
<td>%m</td>
<td>&lt;= 1.0</td>
<td></td>
</tr>
<tr>
<td>Ash, S</td>
<td>BAM 908</td>
<td>%w</td>
<td>0.02 TO 0.12</td>
<td></td>
</tr>
<tr>
<td>Vis, Sol (Toluene) 20.0%w @25C</td>
<td>BAM 922</td>
<td>cP</td>
<td>1,200 TO 1,800</td>
<td></td>
</tr>
</tbody>
</table>

- a Non-staining phenolic antioxidant.
- b Measured on the polymer before hydrogenation.

**Typical Properties** (These are typical values and may not routinely be measured on finished product)

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Units</th>
<th>Typical Value</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific gravity</td>
<td>ASTM D4025</td>
<td>gm/cc</td>
<td>0.90</td>
<td></td>
</tr>
<tr>
<td>Hardness</td>
<td>ASTM 2240</td>
<td>Shore A (10s)</td>
<td>47</td>
<td>b</td>
</tr>
<tr>
<td>Styrene / Rubber ratio</td>
<td>n/a</td>
<td></td>
<td>13/87</td>
<td></td>
</tr>
<tr>
<td>300% Modulus</td>
<td>ASTM D-412</td>
<td>psi</td>
<td>350</td>
<td>a</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>ASTM D-412</td>
<td>%</td>
<td>750</td>
<td>a</td>
</tr>
<tr>
<td>Melt index 230°C, 5kg</td>
<td>n/a</td>
<td>gms/10 min.</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Tensile strength</td>
<td>ASTM D-412</td>
<td>psi</td>
<td>3400</td>
<td>a</td>
</tr>
<tr>
<td>Diblock content</td>
<td>n/a</td>
<td></td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

- a Typical properties determined on film cast from toluene solution.
- b Typical values on polymer compression molded at 300F.

**Packaging**

Kraton Polymers are available in a number of different package types. For information specific to this grade, please contact your local Kraton Polymers representative.

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End Use Requirements

If the finished article is intended for use in food contact and packaging applications, toys, or human contact areas, manufacturers of the final product should observe all relevant regulations. Some of these regulations require tests to be carried out on the final product, e.g. migration. These are the responsibility of the final product manufacturer.

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b. Drugs and other Pharmaceuticals (exclusive of packaging or delivery applications).

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Kraton Polymers products and compounds can accumulate electrostatic charges when rubbed, chafed or abraded. Processing and storage equipment for use with Kraton Polymers products should provide a means of dissipating any charges that may develop.

When processing Kraton Polymers products, maintain a fire watch if the material reaches 225°C (437°F) for Kraton IR and Kraton D (polymers and compounds), and 280°C (536°F) for Kraton G (polymers and compounds). The temperatures listed above are indicated only for safety reasons (risk of fire and product degradation) and are not necessarily recommended for processing. Degradation of the polymer (polymer breakdown) will start at lower temperatures depending on the specific processing conditions. Therefore, operating below these temperatures does not guarantee the absence of product degradation.

Kraton Polymers products (the neat resin or the base product) are high molecular weight polymers which are non-toxic and biologically inactive.

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