DuPont Performance Materials

Elvax® resins Product Data Sheet

<table>
<thead>
<tr>
<th>Description</th>
<th>Product Description</th>
<th>DuPont™ Elvax® 3190A is an extrudable ethylene-vinyl acetate copolymer resin available in pellet form for use in conventional extrusion equipment designed to process polyethylene resins.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restrictions</td>
<td>Material Status</td>
<td>Commercial: Active</td>
</tr>
<tr>
<td>Typical Characteristics</td>
<td>Composition</td>
<td>25% By Weight Vinyl Acetate comonomer content Thermal Stabilizer: BHT antioxidant</td>
</tr>
<tr>
<td></td>
<td>Applications</td>
<td>This resin is designed to provide a low temperature heat seal to itself or many other materials commonly used in flexible packaging applications. The melt properties of this resin allow it to be processed on blown or cast and cast coextrusion film equipment over a wide range of line speeds and film thicknesses. It can also be coextruded with a variety of other polymers. This resin is typically used as a low temperature seal layer in coextruded films.</td>
</tr>
<tr>
<td>Typical Properties</td>
<td>Physical</td>
<td>Nominal Values</td>
</tr>
<tr>
<td></td>
<td>Density ()</td>
<td>0.95 g/cm³</td>
</tr>
<tr>
<td></td>
<td>Melt Flow Rate (190°C/2.16kg)</td>
<td>2 g/10 min</td>
</tr>
<tr>
<td></td>
<td>Thermal</td>
<td>Nominal Values</td>
</tr>
<tr>
<td></td>
<td>Melting Point (DSC)</td>
<td>80 °C (176 °F)</td>
</tr>
<tr>
<td></td>
<td>Freezing Point (DSC)</td>
<td>57 °C (134.6 °F)</td>
</tr>
<tr>
<td></td>
<td>Vicat Softening Point ()</td>
<td>49 °C (120.2 °F)</td>
</tr>
<tr>
<td>Processing Information</td>
<td>Maximum Processing Temperature</td>
<td>235 °C (455 °F)</td>
</tr>
<tr>
<td>FDA Status Information</td>
<td>ELVAX® 3190A EVA Resin complies with Food and Drug Administration Regulation 21 CFR 177.1350(a)(1) - Ethylene-vinyl acetate copolymers, subject to the limitations and requirements therein. This Regulation describes polymers that may be used in contact with food, subject to the finished food-contact article meeting the extractive limitations under the intended conditions of use, as shown in paragraph (b)(1) of the Regulation.</td>
<td></td>
</tr>
</tbody>
</table>
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Regulatory Information

For information on regulatory compliance outside of the U.S.A., consult your local DuPont representative.

Safety & Handling

THE IMPORTANCE OF PROPER HANDLING & STORAGE:

Maintaining proper handling and storage conditions for DuPont™ Elvax® resins is very important to ensure overall product quality and keep the resin in a free-flowing state. If the Elvax® resin is subjected to sunlight, rain or excessive temperatures, then the resin may not process properly or achieve the desired characteristics in the final product.

It is crucial for Elvax® resins to be kept under proper storage and handling conditions because improper storage and handling may cause the resin to "block" (massing of pellets into large clumps that can hinder the ease of material transfer) or lose the ability to flow freely.

Please refer to the Elvax® Handling Guide for additional information.

For additional information on appropriate Handling & Storage of this polymeric resin, please refer to the material Safety Data Sheet.

A Product Safety Bulletin, material Safety Data Sheet, and/or more detailed information on extrusion processing and/or compounding of this polymeric resin for specific applications are available from your DuPont Performance Materials representative.

Regional Centres

DuPont operates in more than 70 countries. For help finding a local representative, please contact one of the following regional customer contact centers:

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