**DuPont™ Elvax® 3165**

**Elvax® resins Product Data Sheet**

### Description

**Product Description**
DuPont™ Elvax® 3165 is an extrudable ethylene-vinyl acetate copolymer resin available in pellet form for use in conventional extrusion equipment designed to process polyethylene resins.

### Restrictions

**Material Status**
- Commercial: Active

**Availability**
- Globally

### Typical Characteristics

**Composition**
- 18% By Weight Vinyl Acetate comonomer content
- Thermal Stabilizer: BHT antioxidant

**Applications**
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 film equipment over a wide range of film thickness and blow-up ratios. It can also be co-extruded with a variety of other polymers. This resin is typically used as low temperature seal layer in co-extruded films.

### Typical Properties

<table>
<thead>
<tr>
<th>Physical</th>
<th>Nominal Values</th>
<th>Test Method(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density ()</td>
<td>0.94 g/cm³</td>
<td>ASTM D792</td>
</tr>
<tr>
<td>Melt Flow Rate (190°C/2.16kg)</td>
<td>0.7 g/10 min</td>
<td>ISO 1183</td>
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<table>
<thead>
<tr>
<th>Thermal</th>
<th>Nominal Values</th>
<th>Test Method(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting Point (DSC)</td>
<td>89°C (192°F)</td>
<td>ASTM D3418</td>
</tr>
<tr>
<td>Freezing Point (DSC)</td>
<td>68°C (154°F)</td>
<td>ASTM D3418</td>
</tr>
<tr>
<td>Vicat Softening Point ()</td>
<td>69°C (156°F)</td>
<td>ASTM D1525</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Processing Information</th>
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<tbody>
<tr>
<td>General</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Processing Temperature</td>
<td>230°C (446°F)</td>
<td></td>
</tr>
</tbody>
</table>

Resin melt temperature should be maintained in the range of 150-175°C (300-350°F) to provide a suitable viscosity and melt strength for blown film extrusion. Higher temperatures may be more appropriate for coextrusion with other grades. Selection of a specific melt temperature will depend on considerations such as desired gauge, height of tower, cooling capacity, extruder hold up time, winding...
Elvax® can be used in conventional extrusion equipment designed to process polyethylene resins. However, corrosion-protected barrels, screws, adapters, and dies are recommended, since, at sustained melt temperatures above 446°F (230°C), ethylene vinyl acetate (EVA) resins may thermally degrade and release corrosive by-products.

**FDA Status Information**

ELVAX® 3165 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.

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**Safety & Handling**

For 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 Packaging and Industrial Polymers representative.

**Read and Understand the Material Safety Data Sheet (MSDS) before using this product**

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This data sheet is effective as of 08/08/2010 06:24:16 PM and supersedes all previous versions.