DuPont Packaging & Industrial Polymers

DuPont™ Elvax® 3165SB

Elvax® resins Product Data Sheet

Description

Product Description
DuPont™ Elvax® 3165SB 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
Slip additive, Antiblock additive
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, ISO 1183</td>
</tr>
<tr>
<td>Melt Flow Rate (190°C/2.16kg)</td>
<td>0.7 g/10 min</td>
<td>ASTM D1238, ISO 1133</td>
</tr>
</tbody>
</table>

<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>88°C (190°F)</td>
<td>ASTM D3418, ISO 3146</td>
</tr>
<tr>
<td>Freezing Point (DSC)</td>
<td>68°C (154°F)</td>
<td>ASTM D3417, ISO 3146</td>
</tr>
<tr>
<td>Vicat Softening Point ()</td>
<td>67°C (153°F)</td>
<td>ASTM D1525, ISO 306</td>
</tr>
</tbody>
</table>

Processing Information

General

Maximum Processing Temperature | 230°C (446°F)

General Processing Information
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 conditions, and other machine variables.

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® 3165SB 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, for use in articles that contact food except for articles used for packing or holding food during cooking.

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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

Regional Centres

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