DuPont™ Elvax® 3200-2

Elvax® resins Product Data Sheet

**Description**

**Product Description**  
DuPont™ Elvax® 3200-2 is an extrudable, wax modified, 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**  
22.5 % By Weight  Vinyl Acetate comonomer content  
Wax  
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 extrusion coating equipment over a wide range of line speeds and coating thicknesses. It can also be coextrusion coated with a variety of other polymers. This resin is typically used as a lidding sealant for a variety of formed containers, in replacement of solvent applied heat seal lacquers. It will provide a good seal against HDPE film and sheet, polypropylene film, PVDC, rigid vinyl, rigid and foamed polystyrene, and nitrocellulose coatings.

Elvax®3200-2 will provide a low-temperature heat seal. The actual heat seal initiation temperature, sealing range, and ultimate seal strength will depend on variables such as coating structure, thickness, substrate type, thermal conductivity of structure, type of heat sealing equipment, end-use environment, and many others.

Because a quantitative description of heat seal performance can only be determined for a given application, it is imperative that heat seal properties be evaluated for each specific application. However, for a relative comparison of heat seal initiation temperatures, the Vicat temperature of each Elvax® resin can be considered.

**Typical Properties**

**Physical**

<table>
<thead>
<tr>
<th>Property</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>32 g/10 min</td>
<td>ISO 1183</td>
</tr>
</tbody>
</table>

**Thermal**

<table>
<thead>
<tr>
<th>Property</th>
<th>Nominal Values</th>
<th>Test Method(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting Point (DSC)</td>
<td>71°C (160°F)</td>
<td>ASTM D3418</td>
</tr>
<tr>
<td>Freezing Point (DSC)</td>
<td>55°C (131°F)</td>
<td>ASTM D3418</td>
</tr>
<tr>
<td>Vicat Softening Point</td>
<td>55°C (131°F)</td>
<td>ASTM D1525</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 200-232°C (390-450°F) to provide a suitable viscosity and melt strength for extrusion coating. Selection of a specific melt temperature will depend on considerations such as coating thickness, substrate type, adhesion desired, line speed, and other machine variables. Excessively high melt temperatures, above 230°C (446°F), may cause thermal degradation of the resin. Gel formation can indicate the onset of polymer degradation. Chemical priming is usually required to achieve adhesion to transparent or smooth substrates such as glassine and foil. To obtain the best chill roll release characteristics, matte finish chill rolls are recommended. More detailed information on processing and physical properties can be obtained by contacting your DuPont™ Packaging and Industrial Polymers representative.

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® 3200-2 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.

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

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**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:

**Americas**

DuPont Company
Chestnut Run Plaza – Bldg. 730
974 Centre Road
Wilmington, Delaware
19805  U.S.A.

**Asia Pacific**

DuPont China Holding Co., Ltd.
Shanghai Branch
399 Keyuan Road, Bldg. 11
Zhangjiang Hi-Tech Park
Pudong New District, Shanghai

**Europe / Middle East / Africa**

DuPont de Nemours Int’l. S.A.
2,Chemin du Pavillon Box 50
CH-1218 Le Grand Saconnex
Geneva, Switzerland
Telephone +41 22 717 51 11
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