DuPont Packaging & Industrial Polymers





Elvax® resins Product Data Sheet

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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	Nominal Values	Test Method(s)		
* Density ()	0.94 g/cm³	ASTM D792	ISO 1183	
* Melt Flow Rate (190°C/2.16kg)	32 g/10 min	ASTM D1238	IS0 1133	
Thermal	Nominal Values	Test Met	Test Method(s)	
Melting Point (DSC)	71°C (160°F)	ASTM D3418	ISO 3146	
Freezing Point (DSC)	55°C (131°F)	ASTM D3418	ISO 3146	
Vicat Softening Point	55°C (131°F)	ASTM D1525	ISO 306	

Processing Information

General

Maximum Processing Temperature
General Processing Information

230°C (446°F)

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 $446^{\circ}F$ (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.

The information and certifications provided herein are based on data we believe to be reliable, to the best of our knowledge. The information and certifications apply only to the specific material designated herein as sold by DuPont and do not apply to use in any process or in combination with any other material. They are provided at the request of and without charge to our customers. Accordingly, DuPont cannot guarantee or warrant such certifications or information and assumes no liability for their use.

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

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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