Elvax® resins Product Data Sheet

Description

Product Description

DuPont™ Elvax® 3182 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

28 % 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 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.

Typical Properties

Physical

Nominal Values

• Density (g/cm³)
0.95

• Melt Flow Rate (190°C/2.16kg)
3 g/10 min

Test Method(s)

ASTM D792
ISO 1183

ASTM D1238
ISO 1133

Thermal

Nominal Values

• Melting Point (DSC)
73°C (163°F)

• Freezing Point (DSC)
51°C (124°F)

• Vicat Softening Point
49°C (120°F)

Test Method(s)

ASTM D3418
ISO 3146

ASTM D3418
ISO 3146

ASTM D1525
ISO 306

Processing Information

General

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

General Processing Information

Resin melt temperature should be maintained in the range of 175-215°C (350-420°F) to provide a suitable viscosity and melt strength for coextrusion in either blown film or cast film applications. Higher temperatures may be more appropriate for co-extrusion with other grades. Selection of a specific melt temperature will depend on considerations such as desired gauge, desired optical properties, chill
roll surface and heat transfer characteristics, tension control, 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® 3182 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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