DuPont Packaging & Industrial Polymers

DuPont™ Elvax® 3172Z

Elvax® resins Product Data Sheet

Description

Product Description
DuPont™ Elvax® 3172Z 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: non-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

Physical
• Density (g/cm³)
  Nominal Values: 0.94 g/cm³
  Test Method(s): ASTM D792, ISO 1183

• Melt Flow Rate (190°C/2.16kg)
  Nominal Values: 2.5 g/10 min
  Test Method(s): ASTM D1238, ISO 1133

Thermal
• Melting Point (DSC)
  Nominal Values: 88°C (190°F)
  Test Method(s): ASTM D3418, ISO 3146

• Freezing Point (DSC)
  Nominal Values: 68°C (154°F)
  Test Method(s): ASTM D3418, ISO 3146

• Vicat Softening Point
  Nominal Values: 67°C (153°F)
  Test Method(s): ASTM D1525, ISO 306

Processing Information

General
• Maximum Processing Temperature
  Nominal Values: 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 co-extrusion 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® 3172Z 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.

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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