DuPont™ Elvax® 3176BFZ

Elvax® resins Product Data Sheet

Description

Product Description
DuPont Elvax® 3176BFZ 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
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 extrusion coating and cast film equipment over a wide range of line speeds and film thicknesses. Typically, cast film of this grade is adhesive laminated to polyester or other substrates as required by the application.

Typical Properties

Physical
Nominal Values
- Density (g/cm³) 0.94 ASTM D792 ISO 1183
- Melt Flow Rate (190°C/2.16kg) 30 g/10 min ASTM D1238 ISO 1133

Thermal
Nominal Values
- Melting Point (DSC) 84°C (183°F) ASTM D3418 ISO 3146
- Freezing Point (DSC) 61°C (142°F) ASTM D3418 ISO 3146
- Vicat Softening Point (DSC) 54°C (129°F) 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 175-230°C (350-450°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. Priming is usually required to achieve the best adhesion to transparent or smooth substrates. To obtain the best chill roll release characteristics, matte finish
chill rolls are recommended. However, if a gloss chill roll is required, the release additives will help prevent sticking.

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® 3176BFZ  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.

**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:

**Americas**
DuPont Company  
Chestnut Run Plaza – Bldg. 730  
974 Centre Road  
Wilmington, Delaware  
19805  U.S.A.  
Toll-Free (USA): 1-800-628-6208  
Telephone: 1-302-774-1000  
Fax: 1-302-355-4013

**Asia Pacific**
DuPont China Holding Co., Ltd.  
Shanghai Branch  
399 Keyuan Road, Bldg. 11  
Zhangjiang Hi-Tech Park  
Pudong New District, Shanghai  
P.R. China (Postcode: 201203)  
Telephone +86 21 3862 2888  
Fax +86-21-3862-2889

**Europe / Middle East / Africa**
DuPont de Nemours Int’1. S.A.  
2,Chemin du Pavillon Box 50  
CH-1218 Le Grand Saconnex  
Geneva, Switzerland  
Telephone +41 22 717 51 11  
Fax +41 22 717 55 00

DuPont do Brasil, S.A.  
Alameda Itapecuru, 506  
06454-080 Barueri, SP Brasil  
Telephone: +55 11 4166 8000  
Fax: +55 11 4166 8736

http://elvax.dupont.com
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