DuPont™ Elvax® 3176CW-3

Elvax® resins Product Data Sheet

**Description**

Product Description
DuPont™ Elvax® 3176CW-3 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
- Chill Roll Release additive
- 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 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**
- **Density (g/cm³)**
  - Nominal Values: 0.94
  - Test Method(s): ASTM D792, ISO 1183

- **Melt Flow Rate (190°C/2.16kg)**
  - Nominal Values: 30 g/10 min
  - Test Method(s): ASTM D1238, ISO 1133

**Thermal**
- **Melting Point (DSC)**
  - Nominal Values: 84°C (183°F)
  - Test Method(s): ASTM D3418, ISO 3146

- **Freezing Point (DSC)**
  - Nominal Values: 61°C (142°F)
  - Test Method(s): ASTM D3418, ISO 3146

- **Vicat Softening Point (°C)**
  - Nominal Values: 54°C (129°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 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 conditions.

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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® 3176CW-3 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:

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

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

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’l. 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

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This data sheet is effective as of 04/28/2008 10:42:54 AM and supersedes all previous versions.