

## DuPont™ Elvax® 3176

### Elvax® resins Product Data Sheet

#### Description

**Product Description** DuPont™ Elvax® 3176 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  
 Chill Roll Release additive, Slip 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	Nominal Values	Test Method (s)	
Density ( )	0.94 g/cm <sup>3</sup>	ASTM D792	ISO 1183
Melt Index (190°C/2.16kg)	30 g/10 min	ASTM D1238	ISO 1133
Thermal	Nominal Values	Test Method (s)	
Melting Point (DSC)	84°C (183°F)	ASTM D3418	ISO 3146
Freezing Point (DSC)	61°C (142°F)	ASTM D3418	
Vicat Softening Point ( )	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® 3176 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.

#### Safety & Handling

A Product Safety Bulletin, Material Safety Data Sheet, and more detailed information on compounding and processing Elvax® resins 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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