DuPont Packaging & Industrial Polymers

DuPont™ Elvax® 3128-1

Elvax® resins Product Data Sheet

Description

Product Description	DuPont™ Elvax® 3128-1 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

Typical Characteristics

Composition	9.3 % 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 film equipment over a wide range of film thickness and blow-up ratios. It can also be cast or used in coextrusion with a variety of other polymers. This resin is typically used as low temperature seal layer in coextruded films.

Typical Properties

Physical	Nominal Values	Test Method(s)	
* Density ()	0.93 g/cm³	ASTM D792	ISO 1183
* Melt Flow Rate (190°C/2.16kg)	2 g/10 min	ASTM D1238	IS0 1133

Thermal	Nominal Values	Test Method(s)	
* Melting Point (DSC)	99°C (210°F)	ASTM D3418	ISO 3146
Freezing Point (DSC)	83°C (181°F)	ASTM D3418	ISO 3146
Vicat Softening Point ()	77°C (171°F)	ASTM D1525	ISO 306

Processing Information

General

* Maximum Processing Temperature	235°C (455°F)
General Processing Information	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 455°F (235°C), ethylene vinyl acetate (EVA) resins may thermally degrade and release corrosive by-products.

Blown Film Processing	Nominal Values

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Blown Film Processing Information	Resin melt temperature should be maintained in the range of 160-210°C (320-410°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.
Feed Zone	135°C (275°F)
Second Zone	160°C (320°F)
Third Zone	185°C (365°F)
Fourth Zone	185°C (365°F)
Fifth Zone	185°C (365°F)
Adapter Zone	185°C (365°F)
Die Zone	185°C (365°F)

Cast Film / Sheet Processing	Nominal Values
Cast Film / Sheet Processing	Resin melt temperature should be maintained in the range of 185-235°C (365-455°F) to provide a suitable viscosity and melt strength for cast film / sheet extrusion. Selection of a specific melt temperature will depend on considerations such as desired gauge, cooling capacity, extruder hold up time, winding conditions, and other machine variables.
Feed Zone	135°C (275°F)
Second Zone	160°C (320°F)
Third Zone	185°C (365°F)
Fourth Zone	210°C (410°F)
Fifth Zone	210°C (410°F)
Adapter Zone	210°C (410°F)
Die Zone	210°C (410°F)

FDA Status Information	ELVAX® 3128-1 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

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This data sheet is effective as of 07/02/2011 01:18:36 PM and supersedes all previous versions.