

Technical Information

ELVAX™ 3165SB
Ethylene Vinyl Acetate Copolymer

Description			
Product Description	ELVAX™ 3165SB 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	18% By Weight Vinyl Acetate comonomer content Slip additive Antiblock 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 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	Nominal Values	Test Method(s)	
*Density ()	0.94 g/cm ³	ASTM D792	ISO 1183
*Melt Flow Rate (190°C/2.16kg)	0.7 g/10 min	ASTM D1238	ISO 1133
Thermal	Nominal Values	Test Method(s)	
*Melting Point (DSC)	88 °C (190.4 °F)	ASTM D3418	ISO 3146
Freezing Point (DSC)	68 °C (154.4 °F)	ASTM D3417	ISO 3146
Vicat Softening Point ()	67 °C (152.6 °F)	ASTM D1525	ISO 306
Processing Information			
*Maximum Processing Temperature	235 °C (455 °F)		
General Processing Information	Resin melt temperature should be maintained in the range of 160-185°C (320-365°F) to provide a suitable viscosity and melt strength for blown film extrusion. Higher temperatures may be more appropriate for coextrusion 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 455°F (235°C), ethylene vinyl acetate (EVA) resins may thermally degrade and release corrosive by-products.		

FDA Status Information

ELVAX™ 3165SB 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 Dow 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, Dow cannot guarantee or warrant such certifications or information and assumes no liability for their use.

Regulatory Information

For information on regulatory compliance outside of the U.S.A., consult your local Dow representative.

Safety & Handling

THE IMPORTANCE OF PROPER HANDLING & STORAGE:

Maintaining proper handling and storage conditions for ELVAX™ resins is very important to ensure overall product quality and keep the resin in a free-flowing state. If the ELVAX™ resin is subjected to sunlight, rain or excessive temperatures, then the resin may not process properly or achieve the desired characteristics in the final product.

It is crucial for ELVAX™ resins to be kept under proper storage and handling conditions because improper storage and handling may cause the resin to “block” (massing of pellets into large clumps that can hinder the ease of material transfer) or lose the ability to flow freely.

Please refer to the ELVAX™ Handling Guide for additional information.

For additional 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 Dow representative.

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- use in cardiac prosthetic devices regardless of the length of time involved (“cardiac prosthetic devices” include, but are not limited to, pacemaker leads and devices, artificial hearts, heart valves, intra-aortic balloons and control systems, and ventricular bypass-assisted devices);
- use as a critical component in medical devices that support or sustain human life; or
- use specifically by pregnant women or in applications designed specifically to promote or interfere with human reproduction.

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Additional Information

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