



## ELVAX™ 3128-1

### Ethylene Vinyl Acetate Copolymer

Description			
Product Description	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/cm <sup>3</sup>	ASTM D792	ISO 1183
*Melt Flow Rate ( 190°C/2.16kg)	2 g/10 min	ASTM D1238	ISO 1133
Thermal	Nominal Values	Test Method(s)	
*Melting Point ( DSC)	99 °C ( 210.2 °F )	ASTM D3418	ISO 3146
Freezing Point ( DSC)	83 °C ( 181.4 °F )	ASTM D3418	ISO 3146
Vicat Softening Point ( )	77 °C ( 170.6 °F )	ASTM D1525	ISO 306
Processing Information			
*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		
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 )		

<b>Cast Film / Sheet Processing</b>	<b>Nominal Values</b>
<b>Processing Information</b>	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.
<b>Feed Zone</b>	135 °C ( 275 °F )
<b>Second Zone</b>	160 °C ( 320 °F )
<b>Third Zone</b>	185 °C ( 365 °F )
<b>Fourth Zone</b>	210 °C ( 410 °F )
<b>Fifth Zone</b>	210 °C ( 410 °F )
<b>Adapter Zone</b>	210 °C ( 410 °F )
<b>Die Zone</b>	210 °C ( 410 °F )

**FDA Status Information** ELVAX™ 3128-1 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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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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