



## ELVAX™ 3190A

### Ethylene Vinyl Acetate Copolymer

#### Description

**Product Description** ELVAX™ 3190A 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** 25% 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 or cast and cast coextrusion film equipment over a wide range of line speeds and film thicknesses. It can also be coextruded with a variety of other polymers. This resin is typically used as a low temperature seal layer in coextruded films.

#### Typical Properties

Physical	Nominal Values	Test Method(s)	
*Density ( )	0.95 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)	80 °C ( 176 °F )	ASTM D3418	ISO 3146
Freezing Point ( DSC)	57 °C ( 134.6 °F )	ASTM D3418	ISO 3146
Vicat Softening Point ( )	49 °C ( 120.2 °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 185-235°C (365-455°F) to provide a suitable viscosity and melt strength for coextrusion in either blown film or cast film applications. 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, desired optical properties, chill roll surface and heat transfer characteristics, tension control, 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 446°F (230°C), ethylene vinyl acetate (EVA) resins may thermally degrade and release corrosive by-products.

#### FDA Status Information

ELVAX™ 3190A 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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#### 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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- c. use as a critical component in medical devices that support or sustain human life; or
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