Dow Packaging & Speciality Plastics
Product Data Sheet

ELVAX™ 470

Ethylene Vinyl Acetate Copolymer

Description

Product Description	ELVAX™ 470 is an ethylene-vinyl acetate copolymer resin for use in industrial applications.

Restrictions

Material Status	Commercial: Active

Typical Characteristics

Composition	18% By Weight Vinyl Acetate comonomer content Thermal Stabilizer: BHT antioxidant
Applications	ELVAX™ resins can be used in a variety of applications involving molding, compounding, extrusion, adhesives, sealants, and wax blends.

Typical Properties

Physical	Nominal Values		Test Method(s)	
*Density ( )	0.941 g/cm³	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)	89 °C (192.2 °F)	ASTM D3418		ISO 3146
Vicat Softening Point ( )	68 °C (154.4 °F)	ASTM D1525		ISO 306

Processing Information

*Maximum Processing Temperature	235 °C (455 °F)
General Processing Information	ELVAX™ resins can be processed by conventional thermoplastic processing techniques, including injection molding, structural foam molding, sheet and shape extrusion, blow molding and wire coating. They can also be processed using conventional rubber processing techniques such as Banbury, two-roll milling and compression molding. 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™ 470 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 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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b. 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);
c. use as a critical component in medical devices that support or sustain human life; or
d. use specifically by pregnant women or in applications designed specifically to promote or interfere with human reproduction.

Dow requests that customers considering use of Dow products in medical applications notify Dow so that appropriate assessments may be conducted.

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Additional Information

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