



ELVAX™ CM576

Ethylene Vinyl Acetate Copolymer

General Information

Product Description ELVAX™ CM576 is an ethylene-vinyl acetate copolymer resin for use in industrial applications.

Status

Material Status Commercial: Active

Typical Characteristics

Composition 28% By Weight Vinyl Acetate comonomer content
Thermal Stabilizer: BHT antioxidant

Features Specialty Grade: High VA, Low MI Grade of ELVAX™

Characteristics / Benefits Specialty grades of ELVAX™ have the unusual combination of high vinyl acetate levels and low melt indices. Due to the high VA content, the polymers have low crystallinity and are relatively polar. Combined with high molecular weight (low MI), the polymers are almost “rubbery” in nature. These polymers can be blended with hydrocarbon waxes to give blends with unusual properties. The blends are mostly wax so they have excellent barrier properties to water as measured by MVTR. They are also relatively high in viscosity, due to the low MI of the polymer, so the blends have good physical properties. The high VA level means that these polymers are also soluble in organic solvents. The low MI gives them good heat resistance and this can be seen in the high Ring and Ball numbers. These polymers also can be used in other end-use markets that need the combination of high vinyl acetate and high molecular weight. One drawback is that the polymers are higher in gel than the standard grades of ELVAX™ so they cannot be used in some film markets.

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 ()	0.95 g/cm ³	ASTM D792	ISO 1183
*Melt Flow Index (190°C/2.16kg)	0.7 g/10 min	ASTM D1238	ISO 1133
Thermal	Nominal Values	Test Method(s)	
*Melting Point(DSC)	71 °C (159.8 °F)	ASTM D3418	ISO 3146
Freezing Point(DSC)	47 °C (116.6 °F)	ASTM D3418	ISO 1133

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™ CM576 resin complies with Food and Drug Administration Regulation 21 CFR 177.1350(d) - - Ethylene-vinyl acetate copolymers, subject to the limitations and requirements therein. This Regulation describes polymers that may be used to make articles (film) for use in contact with food, subject to the finished food-contact film meeting the extractive limitations, as shown in paragraph (e)(2) 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.

