



ELVAX™ CM4875

Ethylene Vinyl Acetate Copolymer

General Information

Product Description ELVAX™ CM4875 is an ethylene-vinyl acetate / acid terpolymer for use in industrial applications.

Status

Material Status Commercial: Active

Typical Characteristics

Composition 28% By Weight Vinyl Acetate comonomer content
Also contains 1 wt% Methacrylic Acid
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 ()	0.954 g/cm ³	ASTM D792	ISO 1183
*Melt Flow Index (190°C/2.16kg)	0.5 g/10 min	ASTM D1238	ISO 1133
Thermal	Nominal Values	Test Method(s)	
*Melting Point(DSC)	70 °C (158 °F)	ASTM D3418	ISO 3146
Freezing Point(DSC)	47 °C (116.6 °F)	ASTM D3418	ISO 3146

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.



FDA Status Information

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

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.

