DuPont Packaging & Industrial Polymers

DuPont™ Elvax® 40L-03

Elvax® resins Product Data Sheet

Description

Product Description	DuPont™ Elvax® 40L-03 is an ethylene-vinyl acetate copolymer resin for use in industrial applications. The melt index is consistent because resin molecular weight distribution is controlled to within a relatively narrow range. The molecular weight is high for this family of copolymers, so finished products will be relatively resistant to mechanical damage and elevated temperatures. Compared with other ethylene/vinyl acetate copolymers, Elvax® 40L-03 contains extremely low amounts of gel, or high-molecular-weight polymer, that can cause undesirable characteristics in finished products. Because Elvax® 40L-03 is somewhat crystalline, it is free flowing and does not mass during handling.

Restrictions

Material Status	• Commercial: Active
Availability	• Globally

Typical Characteristics

Uses	• Industrial Applications Wire & Cable Applications Wire Jacketing
Composition	40% By Weight Vinyl Acetate Thermal Stabilizer: BHT antioxidant
Features	High Molecular Weight, High Viscosity
Applications	Elvax® resins can be used in a variety of applications involving molding, compounding, extrusion, adhesives, sealants, and wax blends. For additional information and properties associated with specific applications, please refer to the Grade Selector Guides found on the Elvax® website for industrial applications. http://www.dupont.com/industrial-polymers/elvax/index.html. Elvax®40L-03 is especially well suited for use in jacketing compounds for automotive ignition and low-smoke cables, and as strippable semiconductive shields for power cables. In these applications, the relatively narrow molecular weight distribution and the low gel properties help ensure that compounds will be consistent and finished products will be smooth-surfaced. Smooth, glossy surfaces are desirable because they can imply quality, while uniformity can enhance long-term performance. Power cable semiconductive shields made with Elvax®40L-03 also benefit from the consistency of their compounds and low gel content. Any inconsistency in shields can

lead to cable failure.

Typical Properties

Physical	Nominal Values	Test Method(s)	
Density ()	0.967 g/cm³	ASTM D792	ISO 1183
Melt Index (190°C/2.16kg)	3 g/10 min	ASTM D1238	ISO 1133

Thermal	Nominal Values	Test Method(s)	
Melting Point (DSC)	58°C (136°F)	ASTM D3418	ISO 3146
Freezing Point (DSC)	26°C (79°F)	ASTM D3418	

Processing Information

General

Maximum Processing Temperature	230°C (446°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 446°F (230°C), ethylene vinyl acetate (EVA) resins may thermally degrade and release corrosive by-products.

FDA Status Information	Elvax® 40L-03 Resin does not comply with U.S. Food and Drug Administration (FDA) Regulations concerning use in contact with food.
Safety & Handling	A Product Safety Bulletin, Material Safety Data Sheet, and more detailed information on compounding and processing Elvax® resins for specific applications are available from your DuPont Packaging and Industrial Polymers representative.

Read and Understand the Material Safety Data Sheet (MSDS) before using this product

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