

Technical Information

Introduction

Viton™ FreeFlow™ 40 is a fluoroelastomer processing additive in pellet form. It is designed for addition to high density polyethylene (HDPE), linear low density polyethylene (LLDPE), or other nonpolar polymers to reduce extrusion defects, such as melt fracture or die buildup.

Advantages

- Process improvements in all types of polyolefins including HDPE, low density polyethylene (LDPE), and LLDPE
- Elimination or minimization of surface imperfections (e.g., melt fracture)
- Reduction of die buildup
- Reduction of die pressure, power requirements, and temperature
- Increased output (at constant die pressure and temperature)
- Improved properties when narrow dies are used in place of wide dies to reduce orientation
- Most thermally stable fluoroelastomer process aid

Formulation Guidelines

To assist in resin formulation, the following can be used as a general guide:

Elimination of Sharkskin Melt Fracture, ppm	
In standard film resins	400–800
In heavily filled or pigmented film	800–1,400
Reduction of Die Buildup, ppm	
	100–250

Levels are parts per million Viton™ FreeFlow™ 40

These numbers are intended to be starting points for formulation. The actual level required will depend on a multitude of factors.

Typical Physical Properties

Appearance	Silver gray to pale amber free-flowing pellets
Packaging	25-kg boxes
Shelf Life, yr	4*

*Normal storage conditions—dry, unopened, temperature below 27 °C (80 °F)

Safety and Handling

Viton™ FreeFlow™ 40 is considered a safe material to handle. It is stable at the temperatures at which polyolefins are formulated and processed. However, prior to the use of Viton™ FreeFlow™ 40 in polyolefins, review the Safety Data Sheet (SDS) and follow the recommendations in the Chemours technical bulletin, “Guide for Concentrate Preparation and Handling of Viton™ FreeFlow™ PPAs.”

For more information, visit Viton.com

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