



FLEXOMER™ DFDA-1137 NT 7

Very Low Density Polyethylene Resin

Overview

FLEXOMER™ DFDA-1137 NT 7 Very Low Density Polyethylene (VLDPE) Resin is an ethylene copolymer intended for use in molding and extrusion applications where high flexibility is desired. It is especially useful for flexible hose and tube applications as well as for blow molding small, squeezable bottles. It has a high molecular weight and a relatively narrow molecular weight distribution and exhibits excellent low temperature toughness and outstanding flex life characteristics. It is also recommended as a blending component to modify and improve the physical properties of high pressure and linear low density polyethylene resins.

Complies with:

- U.S. FDA 21 CFR 177.1520 (c) 3.1a
- EU, No 10/2011
- Canadian HPFB No Objection

Consult the regulations for complete details.

Additive

- Antiblock: No
- Slip: No
- Processing Aid: Yes

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.905 g/cm ³	0.905 g/cm ³	ASTM D792
Base Density ¹	0.905 g/cm ³	0.905 g/cm ³	Dow Method
Melt Index (190°C/2.16 kg)	1.0 g/10 min	1.0 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance F0	> 500 hr	> 500 hr	ASTM D1693A
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus - 1% Secant	17000 psi	117 MPa	ASTM D638
Tensile Strength (Break)	2800 psi	19.3 MPa	ASTM D638
Tensile Elongation (Break)	900 %	900 %	ASTM D638
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore A)	94	94	ASTM D2240
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Brittleness Temperature	< -148 °F	< -100 °C	ASTM D746A
Vicat Softening Temperature	187 °F	86.1 °C	ASTM D1525
Melting Temperature (DSC)	244 °F	118 °C	Dow Method

Additional Information

Compression molded parts prepared according to ASTM D 1928 Procedure C. Properties will vary with changes in molding conditions and aging time.

Extrusion	Nominal Value (English)	Nominal Value (SI)
Melt Temperature	300 to 350 °F	149 to 177 °C

Extrusion Notes

Fabrication Conditions:

- Screw Type: All standard commercial extrusion equipment
- Melt Temperature Range: 300-350°F (149-177 °C)

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

¹ Base density is estimated using the assumption that every 1000 ppm of antiblock in the finished product raises the density of the polymer by 0.0006 g/cm³. Base density is the estimated density of the polymer if it did not contain any antiblock.

