



FLEXOMER™ DFDC-1137 NT 7 Very Low Density Polyethylene Resin

Description

FLEXOMER™ DFDC-1137 NT 7 Very Low Density Polyethylene Resin is an ethylene copolymer intended for use in molding and extrusion applications where high flexibility is desired. It is especially useful for fresh produce packaging films, flexible hose and tube applications as well as for blow molding small, squeezable bottles. This resin is formulated with an additive package that does not contain any intentionally added TNPP (TrisnonylphenylPhosphite). 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: No

Properties¹

Physical	Nominal Value	Unit	Test Method ²
Density	0.905	g/cm ³	ASTM D792
Base Density ³	0.905	g/cm ³	Internal Method
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	1.0	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR) F0	> 500	hr	ASTM D1693
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus – 1% Secant	117	MPa	ASTM D638
Tensile Strength (Break)	19.3	MPa	ASTM D638
Tensile Elongation (Break)	900	%	ASTM D638
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A)	94		ASTM D2240

1. Typical properties: these are not to be construed as specifications. Users should confirm results by their own tests.
2. ASTM: American Society for Testing and Materials
3. 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



Properties (Cont.)

Thermal	Nominal Value	Unit	Test Method
Brittleness Temperature	< -100.0	°C	ASTM D746
Vicat Softening Temperature	86.1	°C	ASTM D1525
Melting Temperature (DSC)	118	°C	Internal Method
Extrusion	Nominal Value	Unit	Test Method
Melt Temperature	149 to 177	°C	Internal Method

Additional Information

Compression molded parts prepared according to ASTM D1928 Procedure C. Properties will vary with changes in molding conditions and aging time.

Extrusion Notes

Fabrication Conditions:

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

