FLEXOMER™ DFDA-1137 NT 7

The Dow Chemical Company - Very Low Density Polyethylene Resin

Tuesday, November 5, 2019

General Information

Product Description

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.

General			
Material Status	• Commercial: Active		
Availability	• Asia Pacific	• North America	
Additive	• Antiblock: No	• Processing Aid: Yes	• Slip: No
Agency Ratings	• EU No 10/2011	• FDA 21 CFR 177.1520(c) 3.1a	• HPFB (Canada) No Objection
Forms	• Pellets		
Processing Method	• Profile Extrusion		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.907		ASTM D792
Melt Mass-Flow Rate (190°C/2.16 kg)	1.0	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR) (F0)	> 500	hr	ASTM D1693A
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus - 1% Secant	17000	psi	ASTM D638
Tensile Strength (Break)	2800	psi	ASTM D638
Tensile Elongation (Break)	900	%	ASTM D638
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness (Shore A)	94		ASTM D2240
Thermal	**Nominal Value**	**Unit**	**Test Method**
Brittleness Temperature	< -148	°F	ASTM D746A
Vicat Softening Temperature	187	°F	ASTM D1525
Melting Temperature (DSC)	244	°F	Internal 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.

Processing Information

Extrusion	Nominal Value	Unit
Melt Temperature	300 to 350	°F

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Extrusion Notes

Fabrication Conditions:

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

Notes

[1] Typical properties: these are not to be construed as specifications.