



Technical Data Sheet

FLEXOMER™ ETS-9067 NT 7 Very Low Density Polyethylene Resin

Overview

- Excellent strength and toughness balance
- Flexible over wide temperature range
- Superior low temperature properties
- Broad sealing temperature range

Complies with:

- U.S. FDA 21 CFR 1520 (c) 3.1a
- European Commission Regulation (EU) No 10/2011

FLEXOMER™ ETS-9067 NT 7 Very Low Density Polyethylene (VLDPE) Resin is intended for use in single or multi-layer blown-film constructions or thick sheets. This resin is formulated with an additive package that does not contain any intentionally added TNPP (TrisnonylphenylPhosphite). Films extruded from FLEXOMER™ ETS-9067 NT 7 Very Low Density Polyethylene Resin have a high tear strength, high impact strength, and high puncture resistance and are readily heat sealable. Addition of slip and antiblock agents should be considered for most applications.

Additive

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

Properties

Physical	Unit	Nominal Value (SI)	Test Method ¹
Density	g/cm ³	0.905	ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16)	g/10 min	.50	ASTM D1238
Films		Nominal Value (SI)	
Film Thickness - Tested	µm	25	
Film Puncture Energy	J	4.52	Internal Method
Film Puncture Force	N	53.4	Internal Method
Film Puncture Resistance	J/cm ³	29.8	Internal Method
Film Toughness - MD	J/cm ³	47.2	ASTM D892
Film Toughness - TD	J/cm ³	59.6	ASTM D882
Secant Modulus			ASTM D882
1% Secant, MD	MPa	130	
2% Secant, MD	MPa	112	

1. ASTM: American Society for Testing and Materials



Properties (Cont.)

Films	Unit	Nominal Value (SI)	Test Method
Secant Modulus			ASTM D882
1% Secant, TD	MPa	129	
2% Secant, TD	MPa	110	
Tensile Strength - MD (Yield)	MPa	6.89	ASTM D882
Tensile Strength - TD (Yield)	MPa	6.21	ASTM D882
Tensile Strength - MD (Break)	MPa	34.1	ASTM D882
Tensile Strength - TD (Break)	MPa	25.8	ASTM D882
Tensile Elongation - MD (Break)	%	330	ASTM D882
Tensile Elongation - TD (Break)	%	560	ASTM D882
Dart Drop Impact	g	870	ASTM D1709B
Elmendorf Tear Strength - MD	g	270	ASTM D1922
Elmendorf Tear Strength - TD	g	440	ASTM D1922
Thermal			
Vicat Softening Temperature	°C	87.8	ASTM D1525
Melting Temperature (DSC)	°C	99.0	Internal Method
Optical			
Gloss (45°)		48	ASTM D2457
Haze	%	11.0	ASTM D1003

Extrusion Notes

Fabrication Conditions for Blown Film:

- Screw Size: 2.5 in. (63.5 mm); 30:1 L/D
- Screw Type: DSBII
- Die Gap: 70 mil (1.8 mm)
- Melt Temperature: 416°F (213°C)
- Output: 10 lb/hr/in. of die circumference
- Die Diameter: 6 in.
- Blow-up Ratio: 2.5:1
- Screw Speed: 59 rpm
- Frost Line Height: 30 in. (762 mm)

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

