



DOW™ LLDPE DFDA-7059 NT 7

The Dow Chemical Company - Linear Low Density Polyethylene Resin

Tuesday, November 5, 2019

General Information

Product Description

DOW DFDA-7059 NT 7 Linear Low Density Polyethylene Resin is an ethylene-butene copolymer which is supplied in pelleted form. It is generally recommended for slot cast thin film applications requiring both clarity and toughness. It is excellent in coextruded, slot cast stretch wrap. This resin is also suitable for use in hose and tube applications.

Main Characteristics:

- High clarity
- High tensile strength
- High elongation
- Good puncture resistance

Complies with:

- U.S. FDA 21 CFR 177.1520(c) 3.2a
- EU, No 10/2011
- Canadian HPFB No Objection

Consult the regulations for complete details.

General

Material Status	• Commercial: Active		
Availability	• Europe	• Latin America	• North America
Additive	• Antiblock: No	• Processing Aid: No	• Slip: No
Agency Ratings	• EU No 10/2011	• FDA 21 CFR 177.1520(c) 3.2a	• HPFB (Canada) No Objection
Forms	• Pellets		
Processing Method	• Blown Film	• Cast Film	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.920		ASTM D792
Melt Mass-Flow Rate (190°C/2.16 kg)	2.0	g/10 min	ASTM D1238
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ² (Yield)	1380	psi	ASTM D638
Tensile Strength ² (Break)	1490	psi	ASTM D638
Tensile Elongation ² (Yield)	11	%	ASTM D638
Tensile Elongation ² (Break)	570	%	ASTM D638
Flexural Modulus - 2% Secant ²	32000	psi	ASTM D790B
Films	Nominal Value	Unit	Test Method
Film Thickness - Tested	1	mil	
Tensile Strength - MD (Break, 1.0 mil, Cast Film)	5000	psi	ASTM D882
Tensile Strength - TD (Break, 1.0 mil, Cast Film)	3600	psi	ASTM D882
Tensile Elongation - MD (Break, 1.0 mil, Cast Film)	450	%	ASTM D882
Tensile Elongation - TD (Break, 1.0 mil, Cast Film)	850	%	ASTM D882
Dart Drop Impact (1.0 mil, Cast Film)	70	g	ASTM D1709A
Elmendorf Tear Strength - MD (1.0 mil, Cast Film)	50	g	ASTM D1922
Elmendorf Tear Strength - TD (1.0 mil, Cast Film)	400	g	ASTM D1922

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Thermal	Nominal Value	Unit	Test Method
Melting Temperature (DSC)	257	°F	Internal Method
Optical	Nominal Value	Unit	Test Method
Gloss (45°, 1.00 mil, Cast Film)	92		ASTM D2457
Haze (1.00 mil, Cast Film)	2.50	%	ASTM D1003

Additional Information

Film properties are typical of slot-cast film extruded at 520°F (270°C).

Processing Information

Extrusion	Nominal Value	Unit
Melt Temperature	520	°F

Extrusion Notes

Fabrication Conditions For Cast Film:

- Extrudable by conventional slot cast film extrusion equipment with only minor machine modifications necessary for optimum use.
- Melt Temperature: 520°F (270°C)

Notes

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

² Plaque molded and tested in accordance with ASTM D4976.