



TUFLIN™ HS-7001 NT 7

The Dow Chemical Company - Linear Low Density Polyethylene Resin

Tuesday, November 5, 2019

General Information

Product Description

TUFLIN™ HS-7001 NT 7 Linear Low Density Polyethylene Resin is an antioxidant modified ethylene-hexene-1 copolymer resin designed for slot cast extrusion. It is supplied in pelleted form. Films produced from HS-7001 NT 7 exhibit high clarity, high tensile strength, high elongation and good puncture resistance. This resin has outstanding drawdown capability.

Main Characteristics:

- Designed for slot cast thin film applications including stretch and cling wraps
- High clarity
- Superior toughness
- Complies with U.S. FDA 21 CFR 177.1520(c) 3.1a
- Consult the regulations for complete details.

General

Material Status	• Commercial: Active
Availability	• North America
Additive	• Antiblock: No • Processing Aid: No • Slip: No
Agency Ratings	• FDA 21 CFR 177.1520(c) 3.1a
Forms	• Pellets
Processing Method	• Cast Film

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.919		ASTM D792
Melt Mass-Flow Rate (190°C/2.16 kg)	3.2	g/10 min	ASTM D1238
Films	Nominal Value	Unit	Test Method
Film Thickness - Tested	1	mil	
Secant Modulus - 1% Secant, MD (1.0 mil)	24000	psi	ASTM D882
Secant Modulus - 1% Secant, TD (1.0 mil)	25000	psi	ASTM D882
Tensile Strength - MD (Yield, 1.0 mil)	4700	psi	ASTM D882
Tensile Strength - TD (Yield, 1.0 mil)	4200	psi	ASTM D882
Tensile Elongation - MD (Break, 1.0 mil)	750	%	ASTM D882
Tensile Elongation - TD (Break, 1.0 mil)	830	%	ASTM D882
Dart Drop Impact (1.0 mil)	120	g	ASTM D1709A
Elmendorf Tear Strength - MD ² (1.0 mil)	370	g	ASTM D1922
Elmendorf Tear Strength - TD ² (1.0 mil)	500	g	ASTM D1922
Optical	Nominal Value	Unit	Test Method
Gloss (45°, 1.00 mil)	90		ASTM D523
Haze (1.00 mil)	2.50	%	ASTM D1003

Processing Information

Extrusion	Nominal Value	Unit
Melt Temperature	510	°F

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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: 510°F (265°C)

Notes

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

² Method B