



TUFLIN™ HS-7001 NT 7

Linear Low Density Polyethylene Resin

Overview

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.

Additive

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

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.917 g/cm ³	0.917 g/cm ³	ASTM D792
Base Density ¹	0.917 g/cm ³	0.917 g/cm ³	Dow Method
Melt Index (190°C/2.16 kg)	3.2 g/10 min	3.2 g/10 min	ASTM D1238
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested	1 mil	25 µm	
Secant Modulus			ASTM D882
1% Secant, MD : 1.0 mil (25 µm)	24000 psi	165 MPa	
1% Secant, TD : 1.0 mil (25 µm)	25000 psi	172 MPa	
Tensile Strength			ASTM D882
MD : Yield, 1.0 mil (25 µm)	4700 psi	32.4 MPa	
TD : Yield, 1.0 mil (25 µm)	4200 psi	29.0 MPa	
Tensile Elongation			ASTM D882
MD : Break, 1.0 mil (25 µm)	750 %	750 %	
TD : Break, 1.0 mil (25 µm)	830 %	830 %	
Dart Drop Impact (1.0 mil (25 µm))	120 g	120 g	ASTM D1709A
Elmendorf Tear Strength ²			ASTM D1922
MD : 1.0 mil (25 µm)	370 g	370 g	
TD : 1.0 mil (25 µm)	500 g	500 g	
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gardner Gloss (45°, 1.00 mil (25.4 µm))	90	90	ASTM D523
Haze (1.00 mil (25.4 µm))	2.50 %	2.50 %	ASTM D1003
Extrusion	Nominal Value (English)	Nominal Value (SI)	
Melt Temperature	510 °F	266 °C	

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

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

¹ 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.

² Method B

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