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/cm³	0.917	g/cm³	ASTM D792
Base Density [1]	0.917	g/cm³	0.917	g/cm³	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	1.0	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))	2.5	%	2.5	%	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)