



TUFLIN™ HS-7098D NT 7

Linear Low Density Polyethylene Resin

Overview

TUFLIN™ HS-7098D NT 7 is an ethylene-hexene copolymer, linear low density polyethylene (LLDPE) resin designed for cast and blown film applications such as trash bags, industrial can liners, and retail bags. Films extruded with HS-7098D NT 7 exhibit superb toughness, high tensile strength and elongation, excellent tear and puncture resistance, and are readily heat sealable.

Main Characteristics:

- Hexene Linear Low Density Resin
- High strength
- Excellent toughness

Complies with:

- U.S. FDA 21 CFR 177.1520(c)3.1a (with Restrictions). An additive present in this product limits use only in film form for food contact applications.

Application:

- Heavy Duty Industrial and Consumer Liners

Additive

- Antiblock: 2500 ppm
- Slip: 1000 ppm
- Processing Aid: Yes

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.923 g/cm ³	0.923 g/cm ³	ASTM D792
Base Density ¹	0.919 g/cm ³	0.919 g/cm ³	Dow Method
Melt Index (190°C/2.16 kg)	1.0 g/10 min	1.0 g/10 min	ASTM D1238
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested	1.0 mil	25 µm	
Tensile Strength			ASTM D882
MD : Break, 1.0 mil (25 µm)	6500 psi	44.8 MPa	
TD : Break, 1.0 mil (25 µm)	5000 psi	34.5 MPa	
Tensile Elongation			ASTM D882
MD : Break, 1.0 mil (25 µm)	500 %	500 %	
TD : Break, 1.0 mil (25 µm)	700 %	700 %	
Dart Drop Impact ² (1.0 mil (25 µm))	200 g	200 g	ASTM D1709A
Elmendorf Tear Strength ³			ASTM D1922
MD : 1.0 mil (25 µm)	310 g	310 g	
TD : 1.0 mil (25 µm)	800 g	800 g	
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gardner Gloss (45°, 1.00 mil (25.4 µm))	45	45	ASTM D523
Haze (1.00 mil (25.4 µm))	16 %	16 %	ASTM D1003
Extrusion	Nominal Value (English)	Nominal Value (SI)	
Melt Temperature	448 °F	231 °C	



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: 448 °F (231 °C)
- Output: 6 lb/hr/in. of die circumference
- Die Diameter: 6 in.
- Blow-Up Ratio: 2.5 to 1
- Screw Speed: 78 rpm
- Frost Line Height: 25 in. (635 mm)
- 1% secant modulus

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 F50

³ Method B

