



INNATE™ TH60 Precision Packaging Resin

Precision Packaging Resin

Overview

INNATE™ TH60 Precision Packaging Resin is designed for exceptional toughness in combination with sealing performance while also delivering robust processability. It has exceptional low-temperature toughness and flex-crack resistance, making it a versatile resin that can meet the needs of demanding end-use applications.

Complies with:

- Europe Commission Regulation (EU) No 10/2011
- U.S. FDA FCN 424
- JHOSPA (Japan Hygienic Olefin and Styrene Plastics Association)

Consult the regulations for complete details.

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.912 g/cm ³	0.912 g/cm ³	ASTM D792
Base Density ¹	0.912 g/cm ³	0.912 g/cm ³	Dow Method
Melt Index (190°C/2.16 kg)	0.85 g/10 min	0.85 g/10 min	ASTM D1238
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested	2 mil	51 µm	
Film Puncture Energy	92.9 in·lb	10.5 J	
Film Puncture Force	23.8 lbf	106 N	
Film Puncture Resistance	318 ft·lb/in ³	26.3 J/cm ³	
Secant Modulus			ASTM D882
2% Secant, MD	21000 psi	145 MPa	
2% Secant, TD	24500 psi	169 MPa	
Tensile Strength			ASTM D882
MD : Yield	1210 psi	8.32 MPa	
TD : Yield	1230 psi	8.51 MPa	
MD : Break	7430 psi	51.2 MPa	
TD : Break	7530 psi	51.9 MPa	
Tensile Elongation			ASTM D882
MD : Break	580 %	580 %	
TD : Break	660 %	660 %	
Dart Drop Impact ²	2100 g	2100 g	ASTM D1709
Elmendorf Tear Strength			ASTM D1922
MD	520 g	520 g	
TD	820 g	820 g	
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (45°)	51	51	ASTM D2457
Haze	14.0 %	14.0 %	ASTM D1003

Additional Information

Fabrication Conditions for 2 mil monolayer blown film:

- Die Diameter: 8 in.
- Screw Type: DSB II
- Die Gap: 90 mil
- Melt Temperature: 433 °F
- Output: 10.3 lb/hr/in. of die circumference
- Screw Size: 3.5 in.
- Blow-Up Ratio: 2.5 to 1
- Screw Speed: 35 rpm
- Frost Line Height: 40 in.



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 A

