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

Consult the regulations for complete details.

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	0.912	g/cm³	0.912	g/cm³	ASTM D792
Base Density [1]	0.912	g/cm³	0.912	g/cm³	Dow Method
Melt Mass-Flow Rate (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	2.0	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/in³	26.3	J/cm³	
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	%	14	%	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