



INNATE™ TH60 Precision Packaging Resin

The Dow Chemical Company - Precision Packaging Resin

Tuesday, November 5, 2019

General Information

Product Description

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.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Latin America	
	• Europe	• North America	
Agency Ratings	• EU 2011/10/EC	• FDA FCN 424	• JHOSPA Unspecified Rating
Forms	• Pellets		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.914		ASTM D792
Melt Mass-Flow Rate (190°C/2.16 kg)	0.85	g/10 min	ASTM D1238
Films	Nominal Value	Unit	Test Method
Film Thickness - Tested	2	mil	
Film Puncture Energy	92.9	in-lb	
Film Puncture Force	23.8	lbf	
Film Puncture Resistance	318	ft-lb/in ³	
Secant Modulus - 2% Secant, MD	21000	psi	ASTM D882
Secant Modulus - 2% Secant, TD	24500	psi	ASTM D882
Tensile Strength - MD (Yield)	1210	psi	ASTM D882
Tensile Strength - TD (Yield)	1230	psi	ASTM D882
Tensile Strength - MD (Break)	7430	psi	ASTM D882
Tensile Strength - TD (Break)	7530	psi	ASTM D882
Tensile Elongation - MD (Break)	580	%	ASTM D882
Tensile Elongation - TD (Break)	660	%	ASTM D882
Dart Drop Impact ²	2100	g	ASTM D1709
Elmendorf Tear Strength - MD	520	g	ASTM D1922
Elmendorf Tear Strength - TD	820	g	ASTM D1922
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	208	°F	ASTM D1525
Melting Temperature (DSC)	253	°F	Internal Method
Optical	Nominal Value	Unit	Test Method
Gloss (45°)	51		ASTM D2457
Haze	14.0	%	ASTM D1003

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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

¹ Typical properties: these are not to be construed as specifications.

² Method A