

Technical Information



DOW™ LDPE 352E

Low Density Polyethylene Resin

Overview

DOW LDPE 352E Low Density Polyethylene Resin is a high clarity resin designed for clarity over wrap applications. This resin does contain erucamide slip and antiblock additives. It can be readily extruded using conventional blown film techniques utilising melt temperatures between 160 and 175 °C.

This resin when properly fabricated exhibits:

- Excellent processability and draw down.
- Outstanding toughness and impact properties.
- Superior optical properties.
- Excellent tensile and tear strength.

Applications:

- Light-produce bags.
- Soft goods packaging.
- Textile packaging.
- Good optical general purpose bags.
- Hygiene films.
- Food packaging films.

Complies with:

- CANADIAN HPFB NO OBJECTION (WITH LIMITATIONS)
- EU, No 10/2011
- U.S. FDA 21 CFR 177.1520(c)2.2

Consult the regulations for complete details.

Additive

- Antiblock
- Erucamide Slip

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.925 g/cm³	0.925 g/cm³	ASTM D792
Melt Index (190°C/2.16 kg)	2.0 g/10 min	2.0 g/10 min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Coefficient of Friction vs. Itself - Dynamic	0.15 to 0.20	0.15 to 0.20	ASTM D1894
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested	2 mil	50 µm	
Secant Modulus			ASTM D882
2% Secant, MD : 2.0 mil (50 µm)	27600 psi	190 MPa	
2% Secant, TD : 2.0 mil (50 µm)	30500 psi	210 MPa	
Tensile Strength			ASTM D882
MD : Yield, 2.0 mil (50 µm)	1450 psi	10.0 MPa	
TD : Yield, 2.0 mil (50 µm)	1600 psi	11.0 MPa	
MD : Break, 2.0 mil (50 µm)	3190 psi	22.0 MPa	
TD : Break, 2.0 mil (50 µm)	2900 psi	20.0 MPa	
Tensile Elongation			ASTM D882
MD : Break, 2.0 mil (50 µm)	450 %	450 %	
TD : Break, 2.0 mil (50 µm)	650 %	650 %	
Dart Drop Impact (2.0 mil (50 µm))	110 g	110 g	ASTM D1709A
Elmendorf Tear Strength			ASTM D1922
MD : 2.0 mil (50 µm)	450 g	450 g	
TD : 2.0 mil (50 µm)	350 g	350 g	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	205 °F	96.0 °C	ISO 306/A

Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (20°, 1.97 mil (50.0 µm))	60	60	ASTM D2457
Haze (1.97 mil (50.0 µm))	8.00 %	8.00 %	ASTM D1003

Extrusion	Nominal Value (English)	Nominal Value (SI)
Melt Temperature	320 to 347 °F	160 to 175 °C

Extrusion Notes
Film Blow-Up ratio 1:2.5

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

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