

Borealis Himod™ FT3280 LDPE for Film

Category : Polymer , Film , Thermoplastic , Polyethylene (PE) , LDPE , Low Density Polyethylene (LDPE), Film Grade

Material Notes:

Himod FT3280 is a tubular, low-density polyethylene grade for the production of packaging films. Compared to standard LDPE grades, the Himod products provide a combination of higher stiffness and improved optical properties. Benefits can be obtained in terms of better down gauging possibilities and improved processability. Excellent printing quality is obtained due to high clarity and better layout. Himod FT3280 is intended for applications like: Stiff, transparent shrink films with high surface gloss and co-extrusion applications. Information provided by the Manufacturer.

Physical Properties	Metric	English	Comments
Density	0.928 g/cc	0.0335 lb/in ³	ISO 1183
Thickness	40.0 microns	1.57 mil	
Melt Flow	0.30 g/10 min @Load 2.16 kg, Temperature 190 °C	0.30 g/10 min @Load 4.76 lb, Temperature 374 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Film Elongation at Break, MD	300 %	300 %	ISO 527-3
Film Elongation at Break, TD	550 %	550 %	ISO 527-3
Secant Modulus, MD	0.290 GPa	42.1 ksi	ASTM D882-A
Secant Modulus, TD	0.300 GPa	43.5 ksi	ASTM D882-A
Impact	71.4	71.4	Puncture Resistance, force (N); ASTM D5748
Puncture Energy	3.20 J	2.36 ft-lb	ASTM D5748
Coefficient of Friction, Dynamic	0.50	0.50	ISO 8295
Tear Strength, Total	2.10 N	0.472 lb (f)	TD; ISO 6383/2
	2.40 N	0.540 lb (f)	MD; ISO 6383/2
Dart Drop	2.50 g/micron	63.5 g/mil	ISO 7765/1
Film Tensile Strength at Break, MD	30.0 MPa	4350 psi	ISO 527-3
Film Tensile Strength at Break, TD	25.0 MPa	3630 psi	ISO 527-3

Thermal Properties	Metric	English	Comments
Melting Point	>= 117 °C	>= 243 °F	ISO 11357/03
Vicat Softening Point	106 °C	223 °F	A (10N); ISO 306

Optical Properties	Metric	English	Comments
Haze	6.0 %	6.0 %	ASTM D1003
Gloss	100 %	100 %	ASTM D2457
Transmission, Visible	90 %	90 %	transparent; thickness not quantified