

Borealis Borstar® FB1460

Borstar FB1460 is a high-density polyethylene film grade, which combines superior physical properties with excellent processability. Due to the high density, the material properties are best utilized by processing at HDPE conditions. Film made of Borstar FB1460 gives a strong and stiff film with high consistency. Borstar FB1460 contains antioxidant.

Information provided by the Manufacturer.

Physical Properties	Metric	English	Comments
Density	0.946 g/cc	0.0342 lb/in ³	ISO 1183
Melt Flow	0.20 g/10 min @Load 5.00 kg, Temperature 190 °C	0.20 g/10 min @Load 11.0 lb, Temperature 374 °F	ISO 1133
High Load Melt Index	6.0 g/10 min @Load 21.6 kg, Temperature 190 °C	6.0 g/10 min @Load 47.6 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	450 %	450 %	ISO 527-3
Secant Modulus, MD	0.600 GPa	87.0 ksi	0.05-1.05%; ISO 527-3
Secant Modulus, TD	0.700 GPa	102 ksi	0.05-1.05%; ISO 527-3
Impact	38	38	Puncture Resistance, force (N); ASTM 5748
Puncture Energy	1.50 J	1.11 ft-lb	ASTM 5748
Tear Strength, Total	0.200 N	0.0450 lb (f)	MD; ISO 6383/2
	1.00 N	0.225 lb (f)	TD; ISO 6383/2
Elmendorf Tear Strength, MD	1.36 g/micron	34.5 g/mil	ISO 6383/2
Elmendorf Tear Strength, TD	20.38 g/micron	517.7 g/mil	ISO 6383/2
Dart Drop	30.0 g/micron	762 g/mil	ISO 7765/1
Film Tensile Strength at Break, MD	75.0 MPa	10900 psi	ISO 527-3
Film Tensile Strength at Break, TD	60.0 MPa	8700 psi	ISO 527-3

Thermal Properties	Metric	English	Comments
Melting Point	>= 131 °C	>= 268 °F	ISO 11357/03
Vicat Softening Point	125 °C	257 °F	A (10N); ISO 30