

SABIC® F00851

SABIC® HDPE F00851 is a high molecular weight High Density Polyethylene copolymer grade typically used for blown film applications. It typically offers a good balance between toughness and stiffness, good impact properties with low gel level. This product is not intended for and must not be used in any pharmaceutical/medical applications.

Information provided by SABIC

Physical Properties	Metric	English	Comments
Density	0.952 g/cc	0.0344 lb/in ³	ASTM D1505
Melt Flow	0.30 g/10 min @Load 5.00 kg, Temperature 190 °C	0.30 g/10 min @Load 11.0 lb, Temperature 374 °F	ISO 1133
	9.0 g/10 min @Load 21.6 kg, Temperature 190 °C	9.0 g/10 min @Load 47.6 lb, Temperature 374 °F	ISO 1133
Mechanical Properties	Metric	English	Comments
Hardness, Shore D	62	62	ISO 868
Film Elongation at Break, MD	400 %	400 %	Properties have been measured at 20 µm blown film with a BUR of 4 using 100% F00851; ISO 527-3
Film Elongation at Break, TD	450 %	450 %	Properties have been measured at 20 µm blown film with a BUR of 4 using 100% F00851; ISO 527-3
Tear Strength, Total	0.200 N	0.0450 lb (f)	Elmendorf, MD; ISO 6383-2
	0.450 N	0.101 lb (f)	Elmendorf, TD; ISO 6383-2
Dart Drop Test	240 g	0.529 lb	ASTM D1709
Film Tensile Strength at Break, MD	50.0 MPa	7250 psi	Properties have been measured at 20 µm blown film with a BUR of 4 using 100% F00851; ISO 527-3
Film Tensile Strength at Break, TD	45.0 MPa	6530 psi	Properties have been measured at 20 µm blown film with a BUR of 4 using 100% F00851; ISO 527-3
Thermal Properties	Metric	English	Comments
Vicat Softening Point	75.0 °C	167 °F	at 50 N (VST/B); ISO 306/B
Brittleness Temperature	<= -80.0 °C	<= -112 °F	ASTM D746