

SABIC SABIC® F01552

SABIC® HDPE F01552 is a medium molecular weight High Density Polyethylene specifically designed for blown film extrusion. It has a broad molecular weight with excellent extrudability, high film strength and draw down characteristics. The material contains anti oxidant.

Information provided by SABIC

Physical Properties	Metric	English	Comments
Density	0.952 g/cc	0.0344 lb/in ³	ASTM D1505
Melt Flow	0.15 g/10 min @Load 2.16 kg, Temperature 190 °C	0.15 g/10 min @Load 4.76 lb, Temperature 374 °F	ISO 1133
	16 g/10 min @Load 21.6 kg, Temperature 190 °C	16 g/10 min @Load 47.6 lb, Temperature 374 °F	ISO 1133
Mechanical Properties	Metric	English	Comments
Film Tensile Strength at Yield, MD	31.0 MPa	4500 psi	Properties are based on 15 µm film produced at a BUR of 4 using 100% F01552.; ASTM D882
Film Tensile Strength at Yield, TD	30.0 MPa	4350 psi	Properties are based on 15 µm film produced at a BUR of 4 using 100% F01552.; ASTM D882
Film Elongation at Break, MD	400 %	400 %	Properties are based on 15 µm film produced at a BUR of 4 using 100% F01552.; ASTM D882
Film Elongation at Break, TD	610 %	610 %	Properties are based on 15 µm film produced at a BUR of 4 using 100% F01552.; ASTM D882
Elmendorf Tear Strength MD	4.0 g	4.0 g	ASTM D1922
Elmendorf Tear Strength TD	40 g	40 g	ASTM D1922

Dart Drop Test	180 g	0.397 lb	ASTM D1709
Film Tensile Strength at Break, MD	55.0 MPa	7980 psi	Properties are based on 15 μ m film produced at a BUR of 4 using 100% F01552.; ASTM D882
Film Tensile Strength at Break, TD	49.0 MPa	7110 psi	Properties are based on 15 μ m film produced at a BUR of 4 using 100% F01552.; ASTM D882
1% Secant Modulus, MD	1400 MPa	203000 psi	Properties are based on 15 μ m film produced at a BUR of 4 using 100% F01552.; ASTM D882
1% Secant Modulus, TD	1700 MPa	247000 psi	Properties are based on 15 μ m film produced at a BUR of 4 using 100% F01552.; ASTM D882
Thermal Properties	Metric	English	Comments
Vicat Softening Point	125 °C	257 °F	ASTM D1525