

SABIC SABIC[®] 218BJ

SABIC[®] LLDPE 218BJ is a butene linear low density polyethylene resin with an additive package typically designed for a broader range of food applications (TNPP free). The good thermal stability allows to use the resin in critical extrusion processing conditions. Films produced from SABIC[®] LLDPE 218BJ have better draw-down ability compared to lower MFR LLDPE resins. This product is not intended for and must not be used in any pharmaceutical/medical applications.

Physical Properties	Metric	English	Comments
Density	0.918 g/cc	0.0332 lb/in ³	ASTM D1505
Melt Flow	2.0 g/10 min @Load 2.16 kg, Temperature 190 °C	2.0 g/10 min @Load 4.76 lb, Temperature 374 °F	ASTM D1238
Mechanical Properties	Metric	English	Comments
Film Tensile Strength at Yield, MD	12.0 MPa	1740 psi	Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 218BJ.; ASTM D882
Film Tensile Strength at Yield, TD	10.0 MPa	1450 psi	Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 218BJ.; ASTM D882
Film Elongation at Break, MD	550 %	550 %	Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 218BJ.; ASTM D882
Film Elongation at Break, TD	670 %	670 %	Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 218BJ.; ASTM D882
Puncture Energy	60.0 J	44.3 ft-lb	J/m; Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 218BJ.; SABIC method
Elmendorf Tear Strength MD	135 g	135 g	Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 218BJ.; ASTM D1922
Elmendorf Tear Strength TD	400 g	400 g	Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 218BJ.; ASTM D1922

Dart Drop	110 g/micron	2790 g/mil	Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 218BJ.; ASTM D1709
Film Tensile Strength at Break, MD	31.0 MPa	4500 psi	Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 218BJ.; ASTM D882
Film Tensile Strength at Break, TD	22.0 MPa	3190 psi	Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 218BJ.; ASTM D882
1% Secant Modulus, MD	200 MPa	29000 psi	Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 218BJ.; ASTM D882
1% Secant Modulus, TD	240 MPa	34800 psi	Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 218BJ.; ASTM D882

Thermal Properties	Metric	English	Comments
Vicat Softening Point	98.0 °C	208 °F	ASTM D1525

Optical Properties	Metric	English	Comments
Haze	7.0 % @Thickness 0.0300 mm	7.0 % @Thickness 0.00118 in	2.5 BUR using 100% 218BJ.; ASTM D1003 60°; Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 218BJ.; ASTM D2457
Gloss	80 %	80 %	