

SABIC® 518NJ

SABIC® LLDPE 518NJ is a fractional melt-index butene linear low density polyethylene resin. Films produced from this resin have high toughness, good puncture resistance, good heat sealing behaviour and excellent machinability on conversion lines. This grade is TNPP free.

Information provided by SABIC

Physical Properties	Metric	English	Comments
Density	0.918 g/cc	0.0332 lb/in ³	ASTM D1505
Melt Flow	0.50 g/10 min @Load 2.16 kg, Temperature 190 °C	0.50 g/10 min @Load 4.76 lb, Temperature 374 °F	ASTM D1238
Mechanical Properties	Metric	English	Comments
Film Tensile Strength at Yield, MD	13.0 MPa	1890 psi	ASTM D882
Film Tensile Strength at Yield, TD	11.0 MPa	1600 psi	ASTM D882
Film Elongation at Break, MD	700 %	700 %	ASTM D882
Film Elongation at Break, TD	850 %	850 %	ASTM D882
Puncture Energy	89.0 J	65.6 ft-lb	J/m; SABIC method
Elmendorf Tear Strength MD	135 g	135 g	ASTM D1922
Elmendorf Tear Strength TD	400 g	400 g	ASTM D1922
Dart Drop	200 g/micron	5080 g/mil	ASTM D1709
Film Tensile Strength at Break, MD	43.0 MPa	6240 psi	ASTM D882
Film Tensile Strength at Break, TD	34.0 MPa	4930 psi	ASTM D882
1% Secant Modulus, MD	220 MPa	31900 psi	ASTM D882
1% Secant Modulus, TD	260 MPa	37700 psi	ASTM D882
Thermal Properties	Metric	English	Comments
Vicat Softening Point	100 °C	212 °F	ASTM D1525
Optical Properties	Metric	English	Comments
Haze	10 %	10 %	ASTM D1003
Gloss	87 %	87 %	60°; ASTM D2457