

SABIC® 218NJ

218NJ is a butene Linear Low Density Polyethylene TNPP free grade suitable for general-purpose packaging. It is easy to process giving good tensile properties, impact strength and optical properties. 218NJ contains no slip and no antiblock additives. Information provided by SABIC

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% 218NJ.; 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% 218NJ.; ASTM D882
Film Elongation at Break, MD	700 %	700 %	Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 218NJ.; ASTM D882
Film Elongation at Break, TD	750 %	750 %	Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 218NJ.; ASTM D882
Puncture Energy	63.0 J	46.5 ft-lb	J/m; Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 218NJ.; SABIC method
Elmendorf Tear Strength MD	130 g	130 g	Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 218NJ.; ASTM D1922
Elmendorf Tear Strength TD	320 g	320 g	Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 218NJ.; ASTM D1922

Dart Drop	85.0 g/micron	2160 g/mil	Properties have been measured by producing 30 μm film with 2.5 BUR using 100% 218NJ.; ASTM D1709
Film Tensile Strength at Break, MD	35.0 MPa	5080 psi	Properties have been measured by producing 30 μm film with 2.5 BUR using 100% 218NJ.; ASTM D882
Film Tensile Strength at Break, TD	29.0 MPa	4210 psi	Properties have been measured by producing 30 μm film with 2.5 BUR using 100% 218NJ.; ASTM D882
1% Secant Modulus, MD	220 MPa	31900 psi	Properties have been measured by producing 30 μm film with 2.5 BUR using 100% 218NJ.; ASTM D882
1% Secant Modulus, TD	260 MPa	37700 psi	Properties have been measured by producing 30 μm film with 2.5 BUR using 100% 218NJ.; ASTM D882
Thermal Properties		Metric	English
Vicat Softening Point		98.0 °C	208 °F
			ASTM D1525
Optical Properties		Metric	English
Haze		13 % @Thickness 0.0300 mm	13 % @Thickness 0.00118 in
			2.5 BUR using 100% 218NJ.; ASTM D1003
Gloss		80 %	60°; Properties have been measured by producing 30 μm film with 2.5 BUR using 100% 218NJ.; ASTM D2457