

SABIC SABIC® 118WJ

SABIC® LLDPE 118WJ is a butene linear low density polyethylene resin typically used for general purpose applications. Films produced from this resin are tough with good puncture resistance, high tensile strength and good hottack properties. The resin contains slip and antiblock additive. SABIC® LLDPE 118WJ is TNPP free. 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	0.918 g/cc	0.0332 lb/in ³	Base resin; ASTM D1505

Melt Flow	1.0 g/10 min @Load 2.16 kg, Temperature 190 °C	1.0 g/10 min @Load 4.76 lb, Temperature 374 °F	ASTM D1238
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Mechanical Properties	Metric	English	Comments
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Film Tensile Strength at Yield, MD	11.0 MPa	1600 psi	Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 118WJ.; ASTM D882
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Film Tensile Strength at Yield, TD	12.0 MPa	1740 psi	Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 118WJ.; ASTM D882
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Film Elongation at Break, MD	750 %	750 %	Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 118WJ.; ASTM D882
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Film Elongation at Break, TD	800 %	800 %	Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 118WJ.; ASTM D882
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Puncture Energy	68.0 J	50.2 ft-lb	J/mm; Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 118WJ.; SABIC method
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Elmendorf Tear Strength MD	165 g	165 g	Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 118WJ.; ASTM D1922
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Elmendorf Tear Strength TD	300 g	300 g	Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 118WJ.; ASTM D1922
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Dart Drop	145 g/micron	3680 g/mil	Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 118WJ.; ASTM D1709
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Film Tensile Strength at Break, MD	40.0 MPa	5800 psi	Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 118WJ.; ASTM D882
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Film Tensile Strength at Break, TD	32.0 MPa	4640 psi	Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 118WJ.; ASTM D882
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1% Secant Modulus, MD	220 MPa	31900 psi	Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 118WJ.; ASTM D882
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1% Secant Modulus, TD	260 MPa	37700 psi	Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 118WJ.; ASTM D882
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Thermal Properties	Metric	English	Comments
Vicat Softening Point	100 °C	212 °F	ASTM D1525

Optical Properties	Metric	English	Comments
Haze	10 % @Thickness 0.0300 mm	10 % @Thickness 0.00118 in	2.5 BUR using 100% 118WJ.; ASTM D1003

Gloss	60 %	60 %	60°; Properties have been measured by producing 30 µm film with 2.5 BUR using 100% 118WJ.; ASTM D2457
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