

SABIC SABIC[®] 218WJ

218WJ 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. 218WJ contains slip and antiblock additives.

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	Mechanical properties have been measured by producing 30 μ film with 2.5 BUR using 100% 218NJ.; ASTM D882

Film Tensile Strength at Yield, TD	10.0 MPa	1450 psi	Mechanical properties have been measured by producing 30 μ film with 2.5 BUR using 100% 218NJ.; ASTM D882
------------------------------------	----------	----------	---

Film Elongation at Break, MD	700 %	700 %	Mechanical properties have been measured by producing 30 μ film with 2.5 BUR using 100% 218NJ.; ASTM D882
------------------------------	-------	-------	---

Film Elongation at Break, TD	750 %	750 %	Mechanical properties have been measured by producing 30 μ film with 2.5 BUR using 100% 218NJ.; ASTM D882
------------------------------	-------	-------	---

Puncture Energy	63.0 J	46.5 ft-lb	J/m; SABIC method
-----------------	--------	------------	-------------------

Elmendorf Tear Strength MD	130 g	130 g	Mechanical properties have been measured by producing 30 μ film with 2.5 BUR using 100% 218NJ.; ASTM D1922
----------------------------	-------	-------	--

Elmendorf Tear Strength TD	320 g	320 g	Mechanical properties have been measured by producing 30 μ film with 2.5 BUR using 100% 218NJ.; ASTM D1922
----------------------------	-------	-------	--

Dart Drop	85.0 g/micron	2160 g/mil	Mechanical properties have been measured by producing 30 μ film with 2.5 BUR using 100% 218NJ.; ASTM D1709
-----------	---------------	------------	--

Film Tensile Strength at Break, MD	35.0 MPa	5080 psi	Mechanical properties have been measured by producing 30 μ film with 2.5 BUR using 100% 218NJ.; ASTM D882
---------------------------------------	----------	----------	---

Film Tensile Strength at Break, TD	29.0 MPa	4210 psi	Mechanical properties have been measured by producing 30 μ film with 2.5 BUR using 100% 218NJ.; ASTM D882
---------------------------------------	----------	----------	---

1% Secant Modulus, MD	220 MPa	31900 psi	Mechanical properties have been measured by producing 30 μ film with 2.5 BUR using 100% 218NJ.; ASTM D882
-----------------------	---------	-----------	---

1% Secant Modulus, TD	260 MPa	37700 psi	Mechanical properties have been measured by producing 30 μ film with 2.5 BUR using 100% 218NJ.; ASTM D882
-----------------------	---------	-----------	---

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

Optical Properties	Metric	English	Comments
Haze	13 % @Thickness 0.0300 mm	13 % @Thickness 0.00118 in	2.5 BUR using 100% 218NJ.; ASTM D1003

Gloss	80 %	80 %	60°; Mechanical properties have been measured by producing 30 μ film with 2.5 BUR using 100% 218NJ.; ASTM D2457
-------	------	------	---