

SABIC SABIC[®] HP0823NN

HP0823NN is a Low Density Polyethylene grade formulated with no slip and no antiblock and no antioxidant additives. It typically exhibits good melt strength with good draw down ability. Films typically exhibit good toughness and good biaxial shrink properties. Information provided by SABIC

Physical Properties	Metric	English	Comments
Density	0.923 g/cc	0.0333 lb/in ³	ASTM D1505

Melt Flow	0.80 g/10 min @Load 2.16 kg, Temperature 190 °C	0.80 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	12.0 MPa	1740 psi	Properties have been measured by producing 50 µm film with 2.5 BUR using 100% HP0823NN.; ASTM D882
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Film Tensile Strength at Yield, TD	12.0 MPa	1740 psi	Properties have been measured by producing 50 µm film with 2.5 BUR using 100% HP0823NN.; ASTM D882
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Film Elongation at Break, MD	240 %	240 %	Properties have been measured by producing 50 µm film with 2.5 BUR using 100% HP0823NN.; ASTM D882
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Film Elongation at Break, TD	650 %	650 %	Properties have been measured by producing 50 µm film with 2.5 BUR using 100% HP0823NN.; ASTM D882
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Elmendorf Tear Strength, MD

10.0 g/micron

254 g/mil

Properties have been measured by producing 50 μ m film with 2.5 BUR using 100% HP0823NN.; ASTM D1922

Elmendorf Tear Strength, TD

6.00 g/micron

152 g/mil

Properties have been measured by producing 50 μ m film with 2.5 BUR using 100% HP0823NN.; ASTM D1922

Dart Drop

2.00 g/micron

50.8 g/mil

Properties have been measured by producing 50 μ m film with 2.5 BUR using 100% HP0823NN.; ASTM D1709

Film Tensile Strength at Break, MD

29.0 MPa

4210 psi

Properties have been measured by producing 50 μ m film with 2.5 BUR using 100% HP0823NN.; ASTM D882

Film Tensile Strength at Break, TD

25.0 MPa

3630 psi

Properties have been measured by producing 50 μ m film with 2.5 BUR using 100% HP0823NN.; ASTM D882

1% Secant Modulus, MD	208 MPa	30200 psi	Properties have been measured by producing 50 µm film with 2.5 BUR using 100% HP0823NN.; ASTM D882
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1% Secant Modulus, TD	310 MPa	45000 psi	Properties have been measured by producing 50 µm film with 2.5 BUR using 100% HP0823NN.; ASTM D882
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Thermal Properties	Metric	English	Comments
Vicat Softening Point	95.0 °C	203 °F	ASTM D1525

Optical Properties	Metric	English	Comments
Haze	10 % @Thickness 0.0500 mm	10 % @Thickness 0.00197 in	2.5 BUR using 100% HP0823NN.; ASTM D1003

Gloss	55 %	55 %	45°; Properties have been measured by producing 50 µm film with 2.5 BUR using 100% HP0823NN.; ASTM D2457
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