

SABIC® HP4027NN

HP4027NN is a Low Density Polyethylene grade with increase density. It typically exhibits better draw down ability with high output. Films typically have excellent optics and high rigidity. HP4027NN contains no slip, no antiblock and no antioxidant additives. Information provided by SABIC

Physical Properties	Metric	English	Comments
Density	0.927 g/cc	0.0335 lb/in ³	ASTM D1505

Melt Flow	4.0 g/10 min @Load 2.16 kg, Temperature 190 °C	4.0 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	ASTM D882
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Film Tensile Strength at Yield, TD	12.0 MPa	1740 psi	ASTM D882
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Film Elongation at Break, MD	256 %	256 %	ASTM D882
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Film Elongation at Break, TD	536 %	536 %	ASTM D882
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Elmendorf Tear Strength, MD	10.0 g/micron	254 g/mil	ASTM D1922
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Elmendorf Tear Strength, TD	14.0 g/micron	356 g/mil	ASTM D1922
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Dart Drop	3.00 g/micron	76.2 g/mil	ASTM D1709
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Film Tensile Strength at Break, MD	19.0 MPa	2760 psi	ASTM D882
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Film Tensile Strength at Break, TD	19.0 MPa	2760 psi	ASTM D882
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1% Secant Modulus, MD	270 MPa	39200 psi	ASTM D882
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1% Secant Modulus, TD	266 MPa	38600 psi	ASTM D882
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Thermal Properties	Metric	English	Comments
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Vicat Softening Point	92.0 °C	198 °F	ASTM D1525
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Optical Properties	Metric	English	Comments
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Haze	5.0 % @Thickness 0.0300 mm	5.0 % @Thickness 0.00118 in	2.5 BUR using 100% HP4027NN.; ASTM D1003
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Gloss	72 %	72 %	45°; ASTM D2457
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