

SABIC SABIC[®] HP0323NN

HP0323NN is a Low Density Polyethylene grade suitable for producing heavy-duty films. It gives outstanding toughness and optical properties in the film. It contains no slip, no antiblock and no antioxidant additives.
Information provided by SABIC

Physical Properties	Metric	English	Comments
Density	0.923 g/cc	0.0333 lb/in ³	ASTM D1505
Melt Flow	0.30 g/10 min @Load 2.16 kg, Temperature 190 °C	0.30 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 50 µm film with 2.5 BUR using 100% HP0323NN.; ASTM D882
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% HP0323NN.; ASTM D882
Film Elongation at Break, MD	235 %	235 %	Properties have been measured by producing 50 µm film with 2.5 BUR using 100% HP0323NN.; ASTM D882
Film Elongation at Break, TD	570 %	570 %	Properties have been measured by producing 50 µm film with 2.5 BUR using 100% HP0323NN.; ASTM D882
Elmendorf Tear Strength, MD	2.40 g/micron	61.0 g/mil	Properties have been measured by producing 50 µm film with 2.5 BUR using 100% HP0323NN.; ASTM D1922
Elmendorf Tear Strength, TD	3.00 g/micron	76.2 g/mil	Properties have been measured by producing 50 µm film with 2.5 BUR using 100% HP0323NN.; ASTM D1922
Dart Drop	2.00 g/micron	50.8 g/mil	Properties have been measured by producing 50 µm film with 2.5 BUR using 100% HP0323NN.; ASTM D1709

Film Tensile Strength at Break, MD	32.0 MPa	4640 psi	Properties have been measured by producing 50 µm film with 2.5 BUR using 100% HP0323NN.; ASTM D882
Film Tensile Strength at Break, TD	30.0 MPa	4350 psi	Properties have been measured by producing 50 µm film with 2.5 BUR using 100% HP0323NN.; ASTM D882
1% Secant Modulus, MD	200 MPa	29000 psi	Properties have been measured by producing 50 µm film with 2.5 BUR using 100% HP0323NN.; ASTM D882
1% Secant Modulus, TD	260 MPa	37700 psi	Properties have been measured by producing 50 µm film with 2.5 BUR using 100% HP0323NN.; ASTM D882
Thermal Properties			
Vicat Softening Point	Metric	English	Comments
	95.0 °C	203 °F	ASTM D1525
Optical Properties			
Haze	Metric	English	Comments
	15 % @Thickness 0.0500 mm	15 % @Thickness 0.00197 in	2.5 BUR using 100% HP0323NN.; ASTM D1003
Gloss	38 %	38 %	45°; Properties have been measured by producing 50 µm film with 2.5 BUR using 100% HP0323NN.; ASTM D2457