

SABIC® P438J

P438J is a Medium Density Polyethylene natural resin and TNPP free designed for extrusion applications. This grade combines stiffness, toughness, high melt strength and low gel content coupled to excellent processability due to its tailored molecular weight distribution and flow properties. It contains an optimized level of stabilizers and is free from any slip or anti-block additives. Information provided by SABIC

Physical Properties	Metric	English	Comments
Density	0.938 g/cc	0.0339 lb/in ³	ASTM D1505
ESCR 10% Igepal®	>= 1000 hour @Temperature 50.0 °C	>= 1000 hour @Temperature 122 °F	F0; ASTM D1693B
Melt Flow	0.40 g/10 min @Load 2.16 kg, Temperature 190 °C	0.40 g/10 min @Load 4.76 lb, Temperature 374 °F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	51	51	ASTM D2240
Tensile Strength at Break	18.0 MPa	2610 psi	ASTM D638
Tensile Strength, Yield	19.0 MPa	2760 psi	ASTM D638
Elongation at Break	>= 600 %	>= 600 %	ASTM D638
Elongation at Yield	11 %	11 %	ASTM D638