

SABIC® P6006N

P6006N is a grade which has a high density (classified as PE4710) and bimodal distribution of the molecular mass. An universal grade for pipe extrusion which, due to keen combination of properties. It can be used for telecommunication, corrugated and spiral pipes.

Physical Properties	Metric	English	Comments
Density	0.949 g/cc	0.0343 lb/in ³	ASTM D1505
Oxidative Induction Time (OIT)	>= 20 min @Temperature 210 °C	>= 20 min @Temperature 410 °F	EN 728
Melt Flow	0.23 g/10 min @Load 5.00 kg, Temperature 190 °C	0.23 g/10 min @Load 11.0 lb, Temperature 374 °F	ISO 1133
	6.2 g/10 min @Load 21.6 kg, Temperature 190 °C	6.2 g/10 min @Load 47.6 lb, Temperature 374 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	64	64	Based on compression molded sheet; ASTM D2240
Tensile Strength, Yield	23.0 MPa	3340 psi	Test specimen according to ISO 527-2 type 1 BA, thickness 2mm with 50mm/min test speed.; ASTM D638
Elongation at Yield	10 %	10 %	Test specimen according to ISO 527-2 type 1 BA, thickness 2mm with 50mm/min test speed.; ISO 527-1/-2
Creep Strength	1050 MPa	152000 psi	Flexural Creep Modulus (4point,1min); DIN 19537-2
Tensile Modulus	0.850 GPa	123 ksi	Test specimen according to ISO 527-2 type 1 BA, thickness 2mm with 50mm/min test speed.; ASTM D638
Charpy Impact, Notched	2.50 J/cm ²	11.9 ft-lb/in ²	Based on compression molded sheet; ISO 179

Thermal Properties	Metric	English	Comments
Vicat Softening Point	74.0 °C	165 °F	ASTM D1525
Brittleness Temperature	<= -80.0 °C	<= -112 °F	ASTM D746