

SABIC® P4808N

P4808 is a natural bimodal high density polyethylene (HDPE) resin, specifically designed for non-pressure pipe extrusion application. It provides good stress crack resistance properties (ESCR).

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
	6.5 g/10 min @Load 21.6 kg, Temperature 190 °C	6.5 g/10 min @Load 47.6 lb, Temperature 374 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	62	62	Based on Compression molded sheet; ASTM D2240

Tensile Strength, Yield	22.0 MPa	3190 psi	Test specimen according to ISO 527-2 type1 BA, thickness 2 mm with 50mm/min test speed; ASTM D638
Elongation at Yield	8.0 %	8.0 %	ISO 527-1/-2
Tensile Modulus	0.850 GPa	123 ksi	ASTM D638
Charpy Impact, Notched	2.30 J/cm ²	10.9 ft-lb/in ²	ISO 179

Thermal Properties	Metric	English	Comments
Vicat Softening Point	74.0 °C	165 °F	ASTM D1525