

SABIC® HDPE P4808N

HIGH DENSITY POLYETHYLENE FOR PIPES

DESCRIPTION

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

TYPICAL APPLICATIONS

Non-Pressure pipe applications such as irrigation, cable conduits, corrugated & gravity pipe segments.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR) ⁽¹⁾			
@ 190°C & 5 kg load ⁽¹⁾	0.23	g/10 min	ISO 1133
@ 190°C & 21.6 kg load	6.5	g/10 min	ISO 1133
Density at 23°C	949	kg/m ³	ASTM D1505
MECHANICAL PROPERTIES			
Tensile Strength at Yield ⁽²⁾	22	MPa	ASTM D638
Tensile Elongation at Yield	8	%	ISO 527-1/-2
Tensile modulus	850	MPa	ASTM D638
Charpy Impact Notched @ 23°C	23	kJ/m ²	ISO 179
Hardness (Shore D) ⁽³⁾	>52	-	ASTM D2240
Flexural Modulus	827	MPa	ISO 178/1A
Flexural Strength	26	MPa	ISO 178
THERMAL PROPERTIES			
Vicat Softening Point	74	°C	ASTM D1525
OIT (210°C)	>20	Minutes	EN 728

(1) Typical values; not to be construed as specification limits

(2) Test specimen according to ISO 527-2 type1 BA, thickness 2 mm with 50mm/min test speed

(3) Based on Compression molded sheet

PROCESSING CONDITIONS

Typical processing conditions for P4808 are: Melt temperature: 190 - 220°C