

SABIC® HDPE P6006NA

HIGH DENSITY POLYETHYLENE FOR PIPE

DESCRIPTION

P6006NA is a high density Polyethylene classified as PE4710 with multimodal distribution of the molecular mass. This is natural color grade suitable for pipe extrusion with excellent combination of properties. It is also suitable for use in telecommunication ducting, corrugated pipes and spiral pipes.

TYPICAL APPLICATIONS

P6006NA is a natural High Density Polyethylene (HDPE) resin specifically designed for Pipe Extrusion. It provides excellent stress crack resistance properties (ESCR) combined with very long-term hydrostatic strength.

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	6.2	g/10 min	ISO 1133
Density at 23°C	949	kg/m ³	ASTM D1505
MECHANICAL PROPERTIES			
Hardness (Shore D) ⁽²⁾	63	-	ASTM D2240
Tensile Strength at Yield ⁽³⁾	23	MPa	ASTM D638
Tensile Elongation at Yield	10	%	ISO 527-1/-2
Tensile modulus	850	MPa	ASTM D638
Charpy Impact Notched @ 23°C	25	kJ/m ²	ISO 179
Flexural Creep Modulus (4point, 1min)	1050	MPa	DIN 19537-2
THERMAL PROPERTIES			
Vicat Softening Point @ 50N (VST/B)	74	°C	ISO 306
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 type 1 BA, thickness 2mm with 50mm/min test speed.

(3) Based on compression molded sheet

PROCESSING CONDITIONS

Typical processing conditions for P6006NA: Melt temperature: 190-220°C