

# 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

Revision 20230403

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>POLYMER PROPERTIES</b>			
<b>Melt Flow Rate (MFR) <sup>(1)</sup></b>			
@ 190°C & 5 kg load <sup>(1)</sup>	0.23	g/10 min	ISO 1133
@ 190°C & 21.6 kg load	6.2	g/10 min	ISO 1133
<b>Density at 23°C</b>	949	kg/m <sup>3</sup>	ASTM D1505
<b>MECHANICAL PROPERTIES</b>			
<b>Hardness (Shore D) <sup>(2)</sup></b>	63	-	ASTM D2240
<b>Tensile Strength at Yield <sup>(3)</sup></b>	23	MPa	ASTM D638
<b>Tensile Elongation at Yield</b>	10	%	ISO 527-1/-2
<b>Tensile modulus</b>	850	MPa	ASTM D638
<b>Charpy Impact Notched @ 23°C</b>	25	kJ/m <sup>2</sup>	ISO 179
<b>Flexural Creep Modulus (4point, 1min)</b>	1050	MPa	DIN 19537-2
<b>THERMAL PROPERTIES</b>			
<b>Vicat Softening Point @ 50N (VST/B)</b>	74	°C	ISO 306
<b>OIT (210°C)</b>	>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

## STORAGE AND HANDLING

Polyethylene material / compound should be stored in a manner to prevent a direct exposure to sunlight and/or heat. The storage area should also be dry and preferably don't exceed 50°C. SABIC would not give warranty to bad storage conditions lead to quality deterioration and inadequate product performance. It is advisable to process PE resin within 6 months after delivery.



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