

# SABIC® HDPE P6006NA

## HIGH DENSITY POLYETHYLENE FOR PIPE

### DESCRIPTION

P6006NA is a high density Polyethylene (potentially ASTM PE4710 cell class requirements) 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 20170425

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>POLYMER PROPERTIES</b>			
<b>Melt Flow Rate <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 <sup>(1)</sup>	6.2	g/10 min	ISO 1133
<b>Density at 23°C <sup>(1)</sup></b>	949	kg/m <sup>3</sup>	ISO 1183
<b>MECHANICAL PROPERTIES</b>			
<b>Hardness (Shore D) <sup>(2)</sup></b>	63	-	ISO 868
<b>Tensile Strength at Yield <sup>(3)</sup></b>	23	MPa	ISO 527-2
<b>Tensile Elongation at Yield <sup>(3)</sup></b>	10	%	ISO 527-2
<b>Tensile Modulus <sup>(3)</sup></b>	850	MPa	ISO 899
<b>Charpy Impact Notched @ 23°C <sup>(2)</sup></b>	25	kJ/m <sup>2</sup>	ISO 179
<b>Flexural Creep Modulus (4point, 1min) <sup>(3)</sup></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	min	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

## HEALTH, SAFETY AND FOOD CONTACT REGULATIONS

Detailed information provided in relevant Material Safety Datasheet and or Standard Food Declaration; Additional specific information can be requested via your local Sales Office...

## 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.

## DISCLAIMER

The information contained herein may include typical properties of our products or their typical performances when used in certain typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties.

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