

# SABIC® HDPE P6006AD

HIGH DENSITY POLYETHYLENE FOR PIPE

## DESCRIPTION

P6006AD is black compound multimodal high density polyethylene (classified as PE112 & PE4710) specially designed for pressure pipe applications. It delivers exceptional processing performance.

## TYPICAL APPLICATIONS

P6006AD is specially developed for pressure pipes for portable water, gas, sewage and other liquids.

## TYPICAL PROPERTY VALUES

Revision 20210318

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 <sup>(1)</sup>	6.4	g/10 min	ISO 1133
<b>Carbon black content <sup>(1)</sup></b>	2.25	%	ISO 6964
<b>Density at 23°C <sup>(1)</sup></b>	959	kg/m <sup>3</sup>	ASTM D1505
<b>MECHANICAL PROPERTIES</b>			
<b>Tensile Strength at Yield <sup>(2)</sup></b>	23	MPa	ASTM D638
<b>Tensile Elongation @ Break <sup>(2)</sup></b>	>350	%	ISO 527
<b>Tensile modulus <sup>(2)</sup></b>	900	MPa	ASTM D638
<b>Tensile creep Moduls @ 100h <sup>(3)</sup></b>	360	MPa	ISO 527-2
<b>Charpy Notched Impact Strength @ 23°C <sup>(3)</sup></b>	26	kJ/m <sup>2</sup>	ISO 179
<b>THERMAL PROPERTIES</b>			
<b>OIT (210°C)</b>	>30	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 P6006AD Melt temperature: 190-220°C. It is recommended to dry the material prior to processing.

## 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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