

**TECHNICAL DATA SHEET****P6006AD –( HDPE PIPE – HIGH DENSITY POLYETHYLENE )****Product Description**

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

**Applications:**

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

**Origin:** SAUDI

- SABIC

<b>Polymer Properties</b>	<b>Typical Values</b>	<b>Units</b>	<b>Test Methods</b>
<b><u>Melt Flow Rate</u><sup>(1)</sup></b>			
@ 190° & 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
Carbon Black content <sup>(1)</sup>	2.25	%	ISO 6964
Density @ 23°C <sup>(1)</sup>	959	kg/m <sup>3</sup>	ASTM D1505
<b><u>Mechanical Properties</u></b>			
Tensile Strength @ Yield <sup>(2)</sup>	23	MPa	ASTM D638
Tensile Elongation @ Break <sup>(2)</sup>	>350	%	ISO 527
Tensile modulus <sup>(2)</sup>	900	MPa	ASTM D638
Tensile creep Moduls @ 100h <sup>(3)</sup>	360	MPa	ISO 527-2
Charpy Notched Impact Strength @ 23°C <sup>(3)</sup>	26	kJ/m <sup>2</sup>	ISO 179
<b><u>Thermal Properties</u></b>			
OIT (210°C)	>30	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 P6006AD Melt temperature: 190-220°C. It is recommended to dry the material prior to processing.

➤ **Storage 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.

