

TECHNICAL DATA SHEET

P6006 –(HDPE PIPE – HIGH DENSITY POLYETHYLENE)

Product Description

- P6006 is black compound high density (class MRS 10 - PE 100) Polyethylene with bimodal distribution of molecular mass. It is specifically designed for pressure Pipe applications. It provides excellent stress crack resistance properties (ESCR) combined with very good long-term hydrostatic strength.

Applications:

- P6006 Pressure pipes for drinking water, irrigation, gas distribution and waste water pipes. It is also recommended for manufacture of chemical liners and containers.

Origin: SAUDI

- SABIC

Properties	Unit	Value ⁽¹⁾	Test Method
<u>Melt Flow Rate</u>			
@ 190° & 5 kg load	g/10 min	0.23	ISO 1133
@ 190°C & 21.6 kg load		6.2	
Carbon Black content	%	2.25	ISO 6964
Density @ 23°C	Kg/m ³	959	ISO 1183
<u>Mechanical Properties</u>			
Tensile Strength @ Yield ⁽³⁾	MPa	23	ISO 527-2
Tensile Elongation @ Yield ⁽³⁾	%	9	
Tensile Modulus ⁽³⁾	MPa	900	
Charpy Impact Notched			
@ 23°C	kJ/m ²	26	ISO 179
@ -30°C		13	
Hardness (Shore D)	-	63	ISO 868
<u>Thermal Properties</u>			
Vicat Softening Point @ 50N (VST/B)	°C	74	ISO 306
OIT (210°C)	Min	>20	EN 728

(1) Typical values: not to be construed as specification limits.

(2) Properties are based on 20 m film produced at 4 BUR using 100% P6006.

(3) Test specimen according to ISO 527-2 type 1 BA, thickness 2mm with 50mm/min test speed.



- Processing Conditions: Typical processing conditions for P6006
- Melt temperature: 190-220°C

➤ **Food Regulation:**

- P6006 grade is suitable for Food contact application. Detailed information is provided in relevant material safety Datasheet and for additional specific information please contacts SABIC local representative for certificate.

➤ **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.

