

## POLYMERS

# SABIC<sup>®</sup> HDPE PIPE P6006

## 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.

## TYPICAL 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.

## TYPICAL DATA

PROPERTIES	Unit	Value <sup>(1)</sup>	Test Method
Melt Flow Rate			
@ 190°C & 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 <sup>3</sup>	959	ISO 1183
<b>MECHANICAL PROPERTIES(2)</b>			
Tensile Strength @ Yield <sup>(3)</sup>	MPa	23	ISO 527-2
Tensile Elongation @ Yield <sup>(3)</sup>	%	9	
Tensile Modulus <sup>(3)</sup>	MPa	900	
Charpy Impact Notched			
@ 23°C	kJ/m <sup>2</sup>	26	ISO 179
@ -30°C		13	
Hardness (Shore D)	-	63	ISO 868
<b>THERMAL PROPERTIES</b>			
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.