



# SABIC® HDPE P6006RC

HIGH DENSITY POLYETHYLENE FOR PIPE

## DESCRIPTION

P6006RC is black compound high density (class MRS 10 Mpa) specifically designed for pressure Pipe applications. It offers excellent resistance to slow crack growth propagation in high-pressure pipe applications and can therefore be used with advanced trenchless pipe installation technologies such as re-lining, horizontal directional drilling & pipe bursting.

## TYPICAL APPLICATIONS

P6006RC is specially developed for pressure pipes for portable water, gas, sewage and other liquids.

## TYPICAL PROPERTY VALUES

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	6.4	g/10 min	ISO 1133
<b>Carbon black content</b>	2.25	%	ISO 6964
<b>Density at 23°C</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</b>	> 350	MPa	ISO 527
<b>Tensile modulus</b>	900	MPa	ASTM D638
<b>Tensile creep Moduls @ 100h</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	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 P6006RC Melt temperature: 190-220°C