

## POLYMERS

# SABIC<sup>®</sup> HDPE Black PIPE P5510

## PRODUCT DESCRIPTION

P5510 is black compound high density (class MRS 8 - PE 80) 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

P5510 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	0.43	ISO 1133
@ 190°C & 21.6 kg load		10.3	
Carbon Black content	%	2.25	ISO 6964
Density @ 23°C	Kg/m <sup>3</sup>	956	ISO 1183
<b>MECHANICAL PROPERTIES<sup>(2)</sup></b>			
Tensile Strength @ Yield <sup>(3)</sup>	MPa	22	ISO 527-2
Tensile Elongation @ Yield <sup>(3)</sup>	%	8	
Tensile Modulus <sup>(3)</sup>	MPa	850	
Charpy Impact Notched			
@ 23°C	kJ/m <sup>2</sup>	24	ISO 179
@ -30°C		8	
Hardness (Shore D)	-	59	ISO 868
<b>THERMAL PROPERTIES</b>			
Vicat Softening Point @ 50N (VST/B)	°C	70	ISO 306
OIT (210°C)	Min	> 20	EN 728

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

(2) Based on Compression molded sheet.

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