

# SABIC® LDPE P223

## LOW DENSITY POLYETHYLENE FOR PIPES

### DESCRIPTION

P223 is a natural low density polyethylene (LDPE) resin, designed for non-pressure pipe extrusion application.

### TYPICAL APPLICATIONS

The grade is designed to be used as blend with HDPE for Non-Pressure pipe applications such as irrigation, cable conduits, corrugated & gravity pipe segments.

### TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>POLYMER PROPERTIES<sup>(1)</sup></b>			
<b>Melt Flow Rate (MFR)</b>			
@ 190°C & 2.16kg load	2	g/10 min	ASTM D1238
@ 190°C & 5 kg load	7.1	g/10 min	ASTM D1238
<b>Density</b>			
Density at 23°C	923	kg/m <sup>3</sup>	ASTM D792
<b>MECHANICAL PROPERTIES<sup>(1)</sup></b>			
<b>Tensile strength</b>			
Tensile @ Yield <sup>(2)</sup>	10	MPa	ASTM D638
Tensile @ Break	12.7	MPa	ASTM D638
Elongation @ Yield	11.4	%	ASTM D638
Elongation @ Break	87.4	%	ASTM D638
Tensile Modulus	324.4	MPa	ASTM D638
Flexural Modulus	155.2	MPa	ASTM D790
<b>Hardness</b>			
Hardness (shore D) <sup>(3)</sup>	42.8	-	ASTM D2240
<b>THERMAL PROPERTIES</b>			
<b>Vicat Softening Temperature</b>			
Vicat	94.5	°C	ASTM D1525

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

(2) Test specimen, thickness 3.2 mm with 50mm/min test speed

(3) Based on injection molded sheet