

# SABIC® HDPE B5202

HIGH DENSITY POLYETHYLENE

## DESCRIPTION

SABIC® HDPE B5202 is a material with a high molecular mass, supplied as pellets.

This product is not intended for and must not be used in any pharmaceutical/medical applications.

## TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>POLYMER PROPERTIES</b>			
Melt Flow Rate			
at 190 °C and 21.6 kg	2.0	dg/min	ISO 1133
<b>Density</b>			
	952	kg/m <sup>3</sup>	ASTM D1505
<b>MECHANICAL PROPERTIES</b>			
<b>Tensile test</b> <sup>(1) (2)</sup>			
stress at yield	25	MPa	ISO 527-2
stress at break	31	MPa	ISO 527-2
strain at break	1000	%	ISO 527-2
tensile modulus	1000	MPa	ISO 527-2
<b>Flexural test</b>			
Flexural modulus	1150	MPa	ISO 178
Flexural strength	26	MPa	ISO 178
<b>Izod impact notched</b>			
at 23 °C	52	kJ/m <sup>2</sup>	ISO 180/A
at -30 °C	36	kJ/m <sup>2</sup>	ISO 180/A
<b>Hardness Shore D</b>			
ESCR (Strain Hardening), Gp	61	-	ISO 868
ESCR (10% Igepal CO-630), F50	21	MPa	ISO 18488
	120	h	ASTM D1693B
<b>THERMAL PROPERTIES</b>			
<b>Heat deflection temperature</b> <sup>(3) (4)</sup>			
at 0.45 MPa (HDT/B)	79	°C	ISO 75-2
<b>Vicat Softening Temperature</b>			
at 10 N (VST/A)	127	°C	ISO 306
<b>DSC test</b>			
melting point	132	°C	ISO 11357-3
enthalpy change	200	J/g	ISO 11357-3