



# SABIC® HDPE M1053

HIGH DENSITY POLYETHYLENE

## DESCRIPTION

SABIC® HDPE M1053 is an easy-to-process, tough grade with good resistance to environmental stress cracking (ESCR) and low notch sensitivity. SABIC® HDPE M1053 is typically used for e.g. caps, closures and pails.

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>			
<b>Melt Flow Rate (MFR)</b>			
at 190 °C and 2.16 kg	10	dg/min	ISO 1133
at 190 °C and 5 kg	28	dg/min	ISO 1133
<b>Density</b> <sup>(1)</sup>	953	kg/m <sup>3</sup>	ISO 1183
<b>MECHANICAL PROPERTIES</b> <sup>(1) (2)</sup>			
<b>Tensile test</b> <sup>(3) (4)</sup>			
stress at yield	26	MPa	ISO 527-2
stress at break	16	MPa	ISO 527-2
strain at break	200	%	ISO 527-2
tensile modulus	1100	MPa	ISO 527-2
<b>Flexural test</b>			
Flexural modulus	1200	MPa	ISO 178
Flexural strength	26	MPa	ISO 178
<b>Izod impact notched</b>			
at 23 °C	3	kJ/m <sup>2</sup>	ISO 180/A
<b>Hardness Shore D</b>	61	-	ISO 868
<b>ESCR on Caps</b> <sup>(5)</sup>	25	h	SABIC method
<b>THERMAL PROPERTIES</b>			
<b>Heat deflection temperature</b> <sup>(1) (2)</sup>			
at 0.45 MPa (HDT/B)	81	°C	ISO 75-2
<b>Vicat Softening Temperature</b> <sup>(1) (2)</sup>			
at 10 N (VST/A)	124	°C	ISO 306
<b>DSC test</b>			
melting point	132	°C	ISO 11357-3
enthalpy change	203	J/g	ISO 11357-3