



SABIC® HDPE M100053

High density polyethylene for Injection moulding

Description.

SABIC® HDPE M100053 is an easy-to-process, very tough grade with high resistance to environmental stress cracking (ESCR) and low notch sensitivity. Suitable for e.g. caps, closures and pails.

The product mentioned herein is in particular not tested and therefore not validated for use in pharmaceutical/ medical applications.

Typical data.

Properties	Units SI	Values	Test methods
Polymer properties			
Melt flow rate (MFR)			ISO 1133
at 190 °C and 2.16 kg	dg/min	10	
at 190 °C and 5 kg	dg/min	28	
Density ¹⁾	kg/m ³	953	ISO 1183
Mechanical properties ^{1) 2)}			
Tensile test ^{3) 4)}			ISO 527-2
stress at yield	MPa	26	
stress at break	MPa	16	
strain at break	%	>200	
tensile modulus	MPa	1100	
Flexural test			ISO 178
Flexural modulus	MPa	1200	
Flexural strength	MPa	26	
Izod impact notched			ISO 180/A
at 23 °C	kJ/m ²	3	
Hardness Shore D	-	61	ISO 868
ESCR ⁵⁾	h	24	SABIC method
Thermal properties			
Heat deflection temperature ^{1) 2)}			ISO 75-2
at 0.45 MPa (HDT/B)	°C	81	
Vicat softening temperature ^{1) 2)}			ISO 306
at 10 N (VST/A)	°C	124	
DSC test			ISO 11357-3
melting point	°C	132	
enthalpy change	J/g	203	