

SABIC® HDPE CC253

HIGH DENSITY POLYETHYLENE

DESCRIPTION

SABIC® HDPE CC253 offers a good combination of stiffness, impact resistance, ESCR and organoleptic properties. The typical applications of this grade are mainly injection molding and compression molding of caps for sparkling water and carbonated soft drinks. SABIC® HDPE CC253 does not contain slip agent.

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
POLYMER PROPERTIES			
Melt Flow Rate			
at 190 °C and 2.16 kg	1.8	dg/min	ISO 1133
Density	952	kg/m ³	ASTM D1505
MECHANICAL PROPERTIES			
Tensile test ^{(1) (2)}			
stress at yield	26	MPa	ISO 527-2
stress at break	30	MPa	ISO 527-2
strain at break	200	%	ISO 527-2
tensile modulus	1100	MPa	ISO 527-2
Flexural test			
Flexural modulus	1150	MPa	ISO 178
Flexural strength	26	MPa	ISO 178
Izod impact notched			
at 23 °C	7	kJ/m ²	ISO 180/A
ESCR on Caps ⁽³⁾			
	100	h	SABIC method
THERMAL PROPERTIES			
Heat deflection temperature			
at 0.45 MPa (HDT/B)	80	°C	ISO 75-2
Vicat Softening Temperature ^{(4) (5)}			
at 10 N (VST/A)	124	°C	ISO 306
DSC test			
melting point	131	°C	ISO 11357-3
enthalpy change	201	J/g	ISO 11357-3
C&C PROPERTIES			
Organoleptic properties	approved	-	SABIC method