



SABIC® HDPE CC3054

HIGH DENSITY POLYETHYLENE

DESCRIPTION

SABIC® HDPE CC3054 is a high density polyethylene copolymer injection molding grade. Its narrow molecular weight distribution and high flow results in low warpage, good rigidity, good gloss and fast molding cycles.

SABIC® HDPE CC3054 is typically used for caps and closures applications and thin wall articles.

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 (MFR)			
at 190 °C and 2.16 kg	30	dg/min	ISO 1133
Density ⁽¹⁾	954	kg/m ³	ISO 1183
MECHANICAL PROPERTIES ^{(1) (2)}			
Tensile test ^{(3) (4)}			
stress at yield	26	MPa	ISO 527-2
stress at break	25	MPa	ISO 527-2
strain at break	200	%	ISO 527-2
tensile modulus	1100	MPa	ISO 527-2
Flexural test			
Flexural modulus	1250	MPa	ISO 178
Flexural strength	27	MPa	ISO 178
Izod impact notched			
at 23 °C	3	kJ/m ²	ISO 180/A
Hardness Shore D	61	-	ISO 868
ESCR on Caps ⁽⁵⁾	10	h	SABIC method
THERMAL PROPERTIES			
Heat deflection temperature ^{(1) (2)}			
at 0.45 MPa (HDT/B)	82	°C	ISO 75-2
Vicat Softening Temperature ^{(1) (2)}			
at 10 N (VST/A)	125	°C	ISO 306
DSC test			
melting point	132	°C	ISO 11357-3
enthalpy change	205	J/g	ISO 11357-3

(1) Compression moulding of test specimen according to ISO 1872-2

(2) Conditioning of test specimen: temp. 23 °C, relative humidity 50 %, 24 hours

(3) Speed of testing: 50 mm/min

(4) Test specimen according to ISO 527-2 type 1BA, thickness 2 mm

(5) Determined in 10% Igepal CO-630 at 40 °C, 6 bar internal water pressure, thickness 1 mm