

# SABIC® HDPE CC453SL

## HIGH DENSITY POLYETHYLENE

### DESCRIPTION

SABIC® HDPE CC453SL offers a good combination of stiffness, impact resistance, ESCR and organoleptic properties. The typical application of this grade is mainly injection molding and compression molding of caps for still water, slightly carbonated or pressurized drinks, juices or any other non-sparkling drinks.

SABIC® HDPE CC453SL does contain slip agent for an easier opening. It is stabilized against UV light because the slip agent is sensitive to light; sunlight exposure should be avoided.

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 2.16 kg	4.0	dg/min	ISO 1133
at 190 °C and 5 kg	10.5	dg/min	ISO 1133
Density	953	kg/m <sup>3</sup>	ASTM D1505
<b>MECHANICAL PROPERTIES</b>			
<b>Tensile test</b> <sup>(1) (2)</sup>			
stress at yield	26	MPa	ISO 527-2
stress at break	31	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	5	kJ/m <sup>2</sup>	ISO 180/A
<b>Hardness Shore D</b>			
61	-	-	ISO 868
<b>ESCR on Caps</b> <sup>(3)</sup>			
60	h	-	SABIC method
<b>THERMAL PROPERTIES</b>			
<b>Heat deflection temperature</b> <sup>(4) (5)</sup>			
at 0.45 MPa (HDT/B)	81	°C	ISO 75-2
<b>Vicat Softening Temperature</b>			
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
<b>C&amp;C PROPERTIES</b>			
Organoleptic properties	approved	-	SABIC method