SABIC® HDPE CC027SL

HIGH DENSITY POLYETHYLENE FOR CAPS & CLOSURES

DESCRIPTION

SABIC® HDPE CC027SL is a multimodal, high density polyethylene. It offers very good process ability in combination with stiffness, impact resistance, excellent ESCR and organoleptic properties with controlled torque level. This grade is intended for injection and compression molding caps for sparkling water and carbonated soft drinks, particularly for latest designs of lightweight.

SABIC® HDPE CC027SL contains slip agent.

TYPICAL APPLICATIONS

- Caps & Closures for Carbonated Soft Drinks (CSD), sparkling water and other carbonated beverages
- Caps & Closures for beverage, food and personal care packaging with high ESCR requirements

This product is not intended for and must not be used in any pharmaceutical/medical applications.

TYPICAL PROPERTY VALUES

Revision 20240819

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
@ 190°C & 2.16 kg load	0.8	g/10 min	ASTM D1238
Density			
@ 23°C	953	kg/m³	ASTM D1505
MECHANICAL PROPERTIES			
Tensile test [1] [2]			
Tensile modulus	1100	MPa	ISO 527-2
Stress at yield	26	MPa	ISO 527-2
Strain at yield	9	%	ISO 527-2
Charpy Impact Strength [3]			
23°C, Type 1, Notch A	9	kJ/m²	ISO 179-1
ESCR [3]			
10% Igepal, F50	250	Hrs	ASTM D1693B
FNCT (6.0 MPa, 2% Arkopal N100, 50 °C) [4]	32	Hrs	ISO 16770
Strain Hardening, Gp	19	MPa	ISO 18488
C&C PROPERTIES			
Organoleptic properties	Approved	-	SABIC method

(1) Test specimen according to ISO 527-2 type 1BA, thickness 2 mm
(2) Speed of testing: 50 mm/min
(3) Compression molding of test specimen according to ISO 17855-2
(4) Compression molded specimen: 90.0x6.0x6.0 mm and 1.0 mm notch depth

PROCESSING CONDITIONS

Barrel temperature: 180-240°C (356-464°F)
Mold temperature: 10-40°C (50-104°F)

STORAGE AND HANDLING

Polyethylene material should be stored in a manner to prevent a direct exposure to sunlight and/or heat. The storage area should also be dry and preferably don't exceed 50°C. SABIC would not give warranty to bad storage conditions, which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is advisable to process PE resin within 6 months after delivery.

DISCLAIMER