

SABIC® HDPE CC458

HIGH DENSITY POLYETHYLENE

DESCRIPTION

SABIC® HDPE CC458 is a multimodal High Density Polyethylene specially developed for the injection and compression molding of caps & closures for the packaging of beverages. It offers very good process ability in combination with stiffness, impact resistance, excellent ESCR and organoleptic properties, designed particularly for latest design of lightweight caps.

TYPICAL APPLICATIONS

Caps & Closures for the packaging of Juice and still mineral water.

Caps & Closures for food, personal care and rigid packaging.

TYPICAL PROPERTY VALUES

Revision 20251008

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES ⁽¹⁾			
Melt Flow Rate (MFR)			
@ 190°C & 2.16 kg load	4	dg/min	ASTM D1238
Density at 23°C	958	kg/m³	ASTM D1505
MECHANICAL PROPERTIES			
Tensile Strength at Yield ⁽²⁾	29	MPa	ISO 527-2
Tensile Strength at Break ⁽²⁾	14	MPa	ASTM D638
Tensile modulus ⁽²⁾	1400	MPa	ISO 527
Flexural Strength ⁽²⁾	23	MPa	ASTM D790
Flexural Modulus ⁽²⁾	950	MPa	ASTM D790
ESCR (10% Igepal), F50 ⁽³⁾	40	Hrs	ASTM D1693B
THERMAL PROPERTIES			
Vicat Softening Point	125	°C	ASTM D1525

(1) Typical values: not to be construed as specification limits.

(2) Based on Injection molded specimens.

(3) Compression molding of test specimen according to ASTM D 1693B

CHARACTERISTICS

Good organoleptic properties.

Complies with food contacts regulations.

Slip agent free grade.

PROCESSING CONDITIONS

Typical processing conditions for CC458 are

Melt temperature: 190 - 250°C

Mold temperature: 15 - 60°C

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CHEMISTRY THAT MATTERS™



FOOD REGULATION

CC458 is suitable for Food contact application. Detailed information is provided in relevant Material Safety Datasheet and for additional specific: information please contact SABIC local representative for certificate.

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

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

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