

POLYMERS

# SABIC<sup>®</sup> HDPE Injection Molding CC453

## PRODUCT DESCRIPTION

SABIC HDPE CC453 is high density polyethylene specially developed for the injection and compression molding of Caps & Closures for the packaging of beverages. This grade offers an ideal combination of impact strength, ESCR and meets organoleptic properties requirements.

## TYPICAL APPLICATIONS

Caps & Closures for the packaging of Juice, water, milk and liquid dairy products.

## KEY FEATURES

- Approved for organoleptic properties.
- Complies with food contacts regulations.
- High impact strength.
- Easy processing by injection and compression molding machines.

## TYPICAL DATA

PROPERTIES	Unit	Value <sup>(1)</sup>	Test Method
Melt Flow Rate			
@ 190°C & 2.16 kg load	g/10 min	4	ASTM D 1238
Density @ 23°C	Kg/m <sup>3</sup>	953	ASTM D 1505
<b>MECHANICAL PROPERTIES <sup>(2)</sup></b>			
Tensile Strength @ Yield	MPa	23	ASTM D 638
Tensile Strength @ Break	MPa	21	ASTM D 638
Tensile Elongation @ Break	%	>800	ASTM D 638
Flexural Strength	MPa	21	ASTM D 790
Flexural Modulus	MPa	800	ASTM D 790
Izod Impact	J/m	150	ASTM D 256
Hardness (Shore D)	-	60	ASTM D 2240
ESCR (100% Igepal), F50*	Hrs	7	ASTM D 1693B
<b>THERMAL PROPERTIES <sup>(2)</sup></b>			
Vicat Softening Point	°C	125	ASTM D 1525
Brittleness Temperature	°C	< -75	ASTM D 746
<b>OTHER PROPERTIES</b>			
Sensoric (Organoleptic properties)	°C	Approved	SABIC Method

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

(2) Based on Injection molded specimens.

\*Based on compression molded sheet

Processing Conditions:

Barrel temperature: 232-260°C (450-500°F)

Mold temperature: 15-60°C (60-140°F)

## HEALTH, SAFETY AND FOOD CONTACT REGULATIONS

Detailed information is provided in the relevant Material Safety Datasheet and or Standard Food Declaration, Additional specific information can be requested via your local Sales Office.

## 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.

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