

SABIC® HDPE CC860

HIGH DENSITY POLYETHYLENE

DESCRIPTION

SABIC® HDPE CC860 is a high-density polyethylene especially developed for injection and compression molding of still water caps that meet organoleptic properties requirements. The material offers an ideal combination of rigidity, impact strength and low warpage.

TYPICAL APPLICATIONS

- Caps & Closures for the packaging of still mineral water.
- Caps & Closures for beverage food and industrial packaging.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES ⁽¹⁾			
Melt Flow Rate (MFR)			
@ 190°C & 2.16 kg load	7.0	g/10 min	ASTM D1238
Density at 23°C	957	kg/m ³	ASTM D1505
Sensoric (Organoleptic Properties)	Approved	-	SABIC method
MECHANICAL PROPERTIES ⁽²⁾			
Tensile test			
Strength @ Yield	25	MPa	ASTM D638
Strength @ Break	10	MPa	ASTM D638
Elongation @ Break	>650	%	ASTM D638
Flexural test			
Flexural Strength	23	MPa	ASTM D790
Flexural Modulus	750	MPa	ASTM D790
Izod impact notched			
@ 23 °C	74	J/m	ASTM D256
Hardness (Shore D)	51	-	ASTM D2240
ESCR (100% Igepal), F50 ⁽³⁾	>4	Hrs	ASTM D1693B
THERMAL PROPERTIES ⁽¹⁾			
Vicat Softening Point	127	°C	ASTM D1525
Brittleness Temperature	<-75	°C	ASTM D746

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

(2) Based on Injection molded specimens.

(3) Based on compression molded sheet

PROCESSING CONDITIONS

Barrel temperature: 200-250°C (390-480°F)

Mold temperature: 15-60°C (60-140°F)