

# SABIC® HDPE CC453G

High Density Polyethylene

Saudi Basic Industries Corporation (SABIC)

## Message:

SABIC® HDPE CC453G offers a good combination of stiffness, impact resistance, ESCR and organoleptic properties. The typical application of this grade is mainly injection moulding and compression moulding of caps for still water, slightly carbonated or pressurized drinks, juices or any other non-sparkling drinks.

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

General Information			
Features	Good ESCR (Stress Crack Resist.) Rigid, good High density Impact resistance, good Good sensory characteristics		
Uses	Shield		
Processing Method	Compression molding Injection molding		
Physical	Nominal Value	Unit	Test Method
Density	0.953	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR)			ISO 1133
190°C/2.16 kg	4.0	g/10 min	ISO 1133
190°C/5.0 kg	11	g/10 min	ISO 1133
Environmental Stress-Cracking Resistance (40°C, 1.00mm, 10% Igepal CO-630, compression molding)	60.0	hr	Internal method
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D, Compression Molded)	61		ISO 868
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (2.00 mm, Compression Molded)	1100	MPa	ISO 527-2/1BA/50
Tensile Stress			ISO 527-2/1BA/50
Yield, 2.00mm, molded	26.0	MPa	ISO 527-2/1BA/50
Fracture, 2.00mm, molded	31.0	MPa	ISO 527-2/1BA/50
Tensile Strain (Break, 2.00 mm, Compression Molded)	> 200	%	ISO 527-2/1BA/50
Flexural Modulus (2.00 mm, Compression Molded)	1200	MPa	ISO 178
Flexural Stress (2.00 mm, Compression Molded)	26.0	MPa	ISO 178

Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C, Compression Molded)	5.0	kJ/m <sup>2</sup>	ISO 180/A
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (0.45 MPa, Unannealed)	81.0	°C	ISO 75-2/B
Vicat Softening Temperature	124	°C	ISO 306/A
Melting Temperature (DSC)	132	°C	ISO 11357-3
Enthalpy Change	203	J/g	ISO 11357-3

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#### Recommended distributors for this material

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