

SABIC® HDPE PCG300054

High Density Polyethylene Copolymer

Saudi Basic Industries Corporation (SABIC)

PROSPECTOR®

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Technical Data

Product Description

SABIC® HDPE grades for healthcare applications are produced under controlled conditions resulting in high product quality, consistency and a high level of purity.

SABIC® HDPE PCG300054 is a high density polyethylene copolymer injection moulding grade. Its narrow molecular weight distribution and high flow results in low warpage, good rigidity, excellent gloss and fast moulding cycles.

SABIC® HDPE PCG300054 is recommended for healthcare packaging applications like, syringes, caps and closures, thin wall articles and other parts for medical devices.

SABIC® HDPE PCG300054 complies with the relevant monographs of the European Pharmacopoeia (EP) and the United States Pharmacopoeia (USPVI). The product mentioned herein may not be used for medical healthcare devices or materials intended for temporary or permanent implementation in the human body.

General

Material Status	• Commercial: Active		
Literature ¹	• Technical Datasheet (English)		
Search for UL Yellow Card	• Saudi Basic Industries Corporation (SABIC)		
Availability	• Europe		
Features	• Fast Molding Cycle • Good Stiffness • High Flow	• High Impact Resistance • High Purity • Low Temperature Impact Resistance	• Low Warpage • Medium Gloss • Narrow Molecular Weight Distribution
Uses	• Caps • Closures	• Medical Packaging • Medical/Healthcare Applications	• Packaging • Thin-walled Parts
Agency Ratings	• EP Unspecified Rating	• USP Class VI	
Processing Method	• Injection Molding		

Physical	Nominal Value Unit	Test Method
Density	0.954 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	30 g/10 min	ISO 1133
Environmental Stress-Cracking Resistance ³ 60°C, 3.00 mm	40.0 hr	Internal Method

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus 2.00 mm, Compression Molded	1100 MPa	ISO 527-2/1BA/50
Tensile Stress Yield, 2.00 mm, Compression Molded Break, 2.00 mm, Compression Molded	26.0 MPa 25.0 MPa	ISO 527-2/1BA/50
Tensile Strain Break, 2.00 mm, Compression Molded	> 200 %	ISO 527-2/1BA/50
Flexural Modulus 23°C, 2.00 mm, Compression Molded	1250 MPa	ISO 178
Flexural Strength 23°C, 2.00 mm, Compression Molded	27.0 MPa	ISO 178

Impact	Nominal Value Unit	Test Method
Notched Izod Impact Strength 23°C, Compression Molded	3.0 kJ/m ²	ISO 180/A

Hardness	Nominal Value Unit	Test Method
Shore Hardness (Shore D, Compression Molded)	61	ISO 868

Thermal	Nominal Value Unit	Test Method
Heat Deflection Temperature 0.45 MPa, Unannealed	82.0 °C	ISO 75-2/B
Vicat Softening Temperature	125 °C	ISO 306/A

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Thermal	Nominal Value Unit	Test Method
Melting Temperature (DSC)	132 °C	ISO 11357-3
Enthalpy Change	205 J/g	ISO 11357-3

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² Typical properties: these are not to be construed as specifications.

³ Rhodacal-DS10, 2 MPa



Where to Buy

Supplier

Saudi Basic Industries Corporation (SABIC)

Riyadh, Kingdom of Saudi Arabia

Telephone: +966-1-225-8000

Web: <http://plastics.sabic.eu/>

Distributor

GAZECHIM PLASTIQUES

GAZECHIM PLASTIQUES is a Pan European distribution company. Contact GAZECHIM PLASTIQUES for availability of individual products by country.

Telephone: +33-4-67-49-55-37

Web: <http://www.gazechim.com/>

Availability: France

GUZMAN GLOBAL S.L

Telephone: +34-963-992-400

Web: <http://www.grupoguzman.com/>

Availability: Portugal

Nexeo Solutions - Europe

Nexeo Solutions is a Pan European distribution company. Contact Nexeo for availability of individual products by country.

Telephone: +34-93-480-9125

Web: <http://www.nexeosolutions.com/>

Availability: Ireland, Poland, United Kingdom

RESINEX Group

RESINEX is a Pan European distribution company. Contact RESINEX for availability of individual products by country.

Telephone: +32-14-672511

Web: <http://www.resinex.com/>

Availability: Europe