# SABIC® HDPE PCG300054

### High Density Polyethylene Copolymer

#### SABIC Americas, Inc.

#### Message:

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 Information					
Features	Copolymer				
	Fast Molding Cycle				
	High Flow				
	High Gloss				
	High Purity				
	High Rigidity Low Warpage				
					Narrow Molecular Weight Distribution
Uses	Caps				
	Closures				
	Medical Packaging				
	Medical/Healthcare Applications				
	Packaging				
	Thin-walled Parts				
Agency Ratings	EP Unspecified Rating				
	USP Class VI				
Forms	Pellets				
Processing Method	Injection Molding				
Physical	Nominal Value	Unit	Test Method		
Density	0.954	g/cm³	ISO 1183		
Melt Mass-Flow Rate (MFR)			ISO 1133		
190°C/2.16 kg	30	g/10 min			
190°C/5.0 kg	80	g/10 min			
Melt Volume-Flow Rate (MVR)			ISO 1133		
190°C/2.16 kg	40.0	cm³/10min			

190°C/5.0 kg	105	cm³/10min	
Hardness	Nominal Value	Unit	Test Method
Shore 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, 2.00 mm, Compression Molded	26.0	MPa	
Break, 2.00 mm, Compression Molded	24.0	MPa	
Tensile Strain (Break, 2.00 mm,			
Compression Molded)	> 200	%	ISO 527-2/1BA/50
Tensile Creep Modulus			ISO 899-1
1 hr	500	MPa	
1000 hr	225	MPa	
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact Strength			ISO 180/A
-30°C, Compression Molded	3.0	kJ/m²	
23°C, Compression Molded	3.0	kJ/m²	
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
Melting Temperature (DSC)	132	°C	DIN 53765
Enthalpy Change	205	J/g	DIN 53765

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#### Recommended distributors for this material

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