SABIC® HDPE PCG453

High Density Polyethylene

Saudi Basic Industries Corporation (SABIC)

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 PCG453 is typically used for the injection moulding of healthcare packaging, caps and closures and other parts for medical packaging. This grade has a very high impact resistance, even at low temperatures.
Compliance to regulations.
SABIC® HDPE PCG453 complies with the relevant monographs of the European Pharmacopoeia (EP) and the United States Pharmacopoeia (USPVI).

General Information			
Features	High Density High Impact Resistance High Purity Low Temperature Impact Resistance		
Uses	Caps Closures Medical Packaging Medical/Healthcare Applications		
Agency Ratings	EP Unspecified Rating USP Class VI		
Processing Method	Injection Molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Density	0.953	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR)			ISO 1133
190°C/2.16 kg	4.7	g/10 min	
190°C/5.0 kg	13	g/10 min	
Environmental Stress-Cracking Resistance [1] (60°C, 3.00 mm, Rhodacal-DS10, Compression Molded)	95.0	hr	Internal Method
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	25.0	MPa	

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 Strength (23°C, Compression Molded)	4.0	kJ/m^2	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
NOTE			
1.	2 MPa		

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

WECHAT