

Braskem PE SGF4960

High Density Polyethylene

Braskem

Technical Data

Product Description

SGF4960 is a homopolymer high-density polyethylene, developed for the blow-molding segment with high density and stiffness combined with high impact resistance. The minimum biobased content of this grade is 96%, determined according to ASTM D6866.

General

Material Status	• Commercial: Active		
Literature ¹	• Technical Datasheet (English)		
Search for UL Yellow Card	• Braskem		
Availability	• Europe	• South America	
Features	• BPA Free • Food Contact Acceptable • High Density	• High Impact Resistance • High Stiffness • Homopolymer	• Renewable Resource Content
Uses	• Blow Molding Applications • Blown Containers	• Cosmetic Packaging • Food Containers	
Agency Ratings	• ASTM D 6866	• FDA 21 CFR 177.1520	
Forms	• Pellets		
Processing Method	• Blow Molding		

Physical	Nominal Value Unit	Test Method
Specific Gravity	0.962 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR)		ASTM D1238
190°C/2.16 kg	0.34 g/10 min	
190°C/21.6 kg	28 g/10 min	
Environmental Stress-Cracking Resistance ³		ASTM D1693
50°C, 2.00 mm, 10% Igepal, Compression Molded, F50	17.0 hr	
50°C, 2.00 mm, 100% Igepal, Compression Molded, F50	19.0 hr	

Mechanical	Nominal Value Unit	Test Method
Tensile Strength		ASTM D638
Yield, Compression Molded	32.0 MPa	
Break, Compression Molded	35.0 MPa	
Flexural Modulus		ASTM D790
1% Secant: Compression Molded	1420 MPa	
2% Secant: Compression Molded	1210 MPa	

Impact	Nominal Value Unit	Test Method
Notched Izod Impact (Compression Molded)	210 J/m	ASTM D256

Hardness	Nominal Value Unit	Test Method
Durometer Hardness		ASTM D2240
Shore D, Compression Molded	64	

Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		ASTM D648
0.45 MPa, Unannealed, Compression Molded	79.0 °C	
Vicat Softening Temperature	129 °C	ASTM D1525 ⁴

Additional Information	Nominal Value Unit	Test Method
Biobased Content	> 96 %	ASTM D6866

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Where to Buy

Supplier

Braskem

Sao Paulo, Brazil

Telephone: 55-11-3576-9999

Web: <http://www.braskem.com.br/>

Distributor

MERCO POLYMERS B.V.

Telephone: +31-20-345-0016

Web: <http://www.merco-polymers.com/>

Availability: Belgium, Luxembourg, Netherlands

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: Spain

Schmidt Kunststoff GmbH

Telephone: +49-221-33-77-79-0

Web: <http://www.sk-kunststoff.com/>

Availability: Austria, Germany, Switzerland

