

High Density Polyethylene SGD4960

Description:

SGD4960 is a high density polyethylene homopolymer especially designed for blow molding processing. It features high density and stiffness combined with high impact resistance. The minimum biobased content of this grade is 96%, determined according to ASTM D6866.

Application:

Bottles for food applications such as dairy products and beverages.
Containers for non-food applications such as alcohol, cosmetics and lubricant oils.

Process:

Blow Molding.

Control Properties:

	ASTM Method	Units	Values
Melt Flow Rate (190/2.16)	D 1238	g/10 min	0.70
Melt Flow Rate (190/21.6)	D 1238	g/10 min	50
Density	D 792	g/cm ³	0.961

Typical Properties:

Plaque Properties^a

	ASTM Method	Units	Values
Tensile Strength at Yield	D 638	MPa	32
Tensile Strength at Break	D 638	MPa	22
Flexural Modulus – 1% Secant	D 790	MPa	1600
Shore D Hardness	D 2240		64
Izod Impact Strength	D 256	J/m	89
Environmental Stress Cracking Resistance ^b	D 1693	h/F50	19
Environmental Stress Cracking Resistance ^c	D 1693	h/F50	24
Deflection Temperature under Load at 0.455 MPa	D 648	°C	79
Vicat Softening Temperature at 10 N	D 1525	°C	128

(a) Test specimens prepared from compression molded sheet made according to ASTM D 4703.

(b) Compression molded 2 mm thickness, 0.3 mm notched-plaques. 10% Igepal. 50°C.

(c) Compression molded 2 mm thickness, 0.3 mm notched-plaques. 100% Igepal. 50°C.

Final Remarks:

1. This resin meets the requirements for olefin polymers as defined in 21 CFR, section 177.1520 issued by FDA – Food and Drug Administration in force on the date of publication of this specification. The additives present are covered in appropriate regulation by FDA
2. The information presented in this Data Sheet reflects typical values obtained in our laboratories, but should not be considered as absolute or as warranted values. Only the properties and values mentioned on the Certificate of Quality are considered as guarantee of the product.
3. In some applications, Braskem has developed tailor-made resins to reach specific requirements.
4. In case of doubt regarding utilization, or for other applications, please contact our Technical Assistance.
5. For information about safety, handling, individual protection, first aids and waste disposal, please see MSDS. CAS Registry number: 9002-88-4
6. The mentioned values in this report can be changed at any moment without Braskem previous communication.
7. Unless specified, Braskem does not recommend the use of this grade for the fabrication of packages, parts or any other type of product designed to medical and/or pharmaceutical applications.
8. The content of this Data Sheet replaces previous revisions published for this product.
9. This resin does not contain the substance Bisphenol A (BPA, CAS # No. 80-05-7) in its composition.