# High Density Polyethylene SGF4960

## 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 carbon content of this grade is 96%, determined according to ASTM D6866.

## Applications:

Blow molding small volumes, Dairy based products packaging, Juice packaging, Food packaging, bottles for ethylic alcohol, toys

## Processes:

Extrusion Blow Molding

## Control Properties:

| Feature | Method | Units | Values |
|---|---|---|---|
| Density | ISO 1183-1 | g/cm³ | 0.962 |
| Melt Flow Rate (190°C/2,16 kg) | ISO 1133 | g/10 min | 0.34 |

## Typical Properties - Plaque[1]:

Plaque Properties

| Feature | Method | Units | Values |
|---|---|---|---|
| Tensile Strenght at Yeld (b) | ISO 527 | MPa | 30 |
| Tensile Strenght at Break (b) | ISO 527 | MPa | 17 |
| Flexural modulus Chord 0.05-0.25 % (b) | ISO 178 | MPa | 1410 |
| Izod Impact Strength 23 °C (b) | ISO 180 | kJ/m² | 9 |
| Vicat Softening Temperature at 10 N (a) | ISO 306 | °C | 128 |
| Deflection Temperature Under Load at 0.455 MPa (b) | ISO 75 | °C | 70 |

1 Test specimens prepared from compression molded sheet made according to ISO 293. Plaque Thickness: a) 3 mm b) 4 mm c) 6 mm