

# Braskem PE SGM9450F

High Density Polyethylene

Braskem

Message:

Description:  
SGM9450F is a high-density polyethylene, developed for the high molecular weight film extrusion segment produced with bimodal technology. The film produced from this resin has high tenacity and excellent resistance to impact characteristics. This resin has wide molar mass distribution that makes it easier to process.  
The minimum biobased content of this grade is 96%, determined according to ASTM D6866.

Application:  
Bags in general (like T-shirt bags, Handle Bags, Star Bags, others);  
Geomembranes.

General Information			
Features	High molecular weight		
	High density		
	Updatable resources		
	Wide molecular weight distribution		
	Compliance of Food Exposure		
Uses	Bags		
Agency Ratings	FDA 21 CFR 177.1520		
Processing Method	Blow film		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.952	g/cm <sup>3</sup>	ASTM D792
Melt Mass-Flow Rate (MFR)			ASTM D1238
190°C/21.6 kg	9.3	g/10 min	ASTM D1238
190°C/5.0 kg	0.33	g/10 min	ASTM D1238
Films	Nominal Value	Unit	Test Method
Tensile Strength			ASTM D882
MD: Yield, 13 µm	40.0	MPa	ASTM D882
TD: Yield, 13 µm	30.0	MPa	ASTM D882
MD: Broken, 13 µm	85.0	MPa	ASTM D882
TD: Broken, 13 µm	45.0	MPa	ASTM D882
Tensile Elongation			ASTM D882
MD: Broken, 13 µm	590	%	ASTM D882
TD: Broken, 13 µm	740	%	ASTM D882
Dart Drop Impact <sup>1</sup>	250	g	ASTM D1709
Elmendorf Tear Strength			ASTM D1922
MD : 13 µm	58	g	ASTM D1922
TD : 13 µm	51	g	ASTM D1922
Additional Information	Nominal Value	Unit	Test Method

Puncture Resistance (12.5 μm)	80.0	J/m	Internal method
Sealing Initial Temperature	125	°C	Internal method
Biobased Content	> 96	%	ASTM D6866

#### NOTE

1. F50

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### 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

