

**High Density Polyethylene SGM9450F****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.

**Applications:**

Film rolls, Geodesic film

**Processes:**

Blown Film Extrusion

**Control Properties:**

Feature	Method	Units	Values
Melt Flow Rate (190°C/5kg)	ASTM D 1238	g/10 min	0.33
Melt Flow Rate (190°C/21.6kg)	D 1238	g/10 min	9.3
Density	D 792	g/cm <sup>3</sup>	0.952

**Typical Properties - Films:**

Blown Film Properties<sup>a</sup>

Feature	Method	Units	Values
Tensile Strength at Break (MD/TD)	D 882	MPa	85/45
Elongation at Break (MD/TD)	D 882	%	590/740
Tensile Strength at Yield (MD/TD)	D 882	MPa	40/30
Elongation at Yield (MD/TD)	D 882	%	15/5
Dart Drop Impact	D 1709	g/F50	200
Elmendorf Tear Strength (MD/TD)	D 1922	gF	5/50
Secant Modulus 1%	D 882	MPa	750/870
Sealing Initial Temperature	Braskem	°C	125

(a) Film with 12,5 microns produce in a 75mm extruder with 1,3 mm of die gap and a blow-up ratio of 4.5:1. (MD = extrusion direction and TD = transversal direction).

**Final Remarks:**

1. 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.
2. For regulatory information of the product, please refer to Regulatory Document or contact our Technical Assistance Area.
3. For information about safety, handling, individual protection, first aids and waste disposal, please refer to MSDS.
4. The mentioned values in this report can be changed at any moment without Braskem previous communication.