

# TECHNICAL DATASHEET

## PS 125



### PRODUCT DESCRIPTION

General purpose polystyrene SABIC® PS 125 is manufactured by continuous mass polymerization of styrene monomer. It is a crystal-like, hard and brittle polymer; medium flow with excellent clarity and higher Vicat and Heat Distortion temperatures allow its use in many different applications.

### TRPICAL APPLICATION

It is recommended for the manufacture of a variety of packaging items, namely jewelry and gift boxes; medical supplies such as petri dishes, test tubes and specimen jars, etc. Another important use is in capping the high impact polystyrene coextruded sheet for high surface gloss. It could be blended with impact modifier resin for clear packaging articles.

### TYPICAL DATA

Properties	Units SI	Values	Test methods
<b>Polymer properties</b>			
<b>Melt flow rate (MFR)</b> at 200 °C and 5 kg	g/10 min	<b>7.0</b>	ASTM D 1238
<b>Density</b>	kg/m <sup>3</sup>	<b>1050</b>	ASTM D 792
<b>Bulk Density</b> Method B	kg/m <sup>3</sup>	<b>600</b>	ASTM D 1895
<b>Mechanical properties</b> <sup>1)</sup>			
<b>Tensile test</b> <sup>2)</sup>			ASTM D 638
tensile strength	MPa	<b>43</b>	
tensile elongation	%	<b>2</b>	
tensile modulus	MPa	<b>2598</b>	
<b>Flexural test</b>			ASTM D 790
Flexural modulus	MPa	<b>3529</b>	
Flexural strength	MPa	<b>82</b>	
<b>Izod impact notched at 23 °C</b> <sup>3)</sup>	J/m	<b>12</b>	ASTM D 256
<b>Rockwell hardness</b>			ASTM D 785
L-scale	-	<b>95</b>	
M-scale	-	<b>63</b>	
<b>Thermal properties</b> <sup>1)</sup>			
<b>Heat deflection temperature</b> Method B, 455 KPa, annealed	°C	<b>90</b>	ASTM D 648
<b>Vicat softening temperature</b> Rate A, 1 kg/50 °C	°C	<b>95</b>	ASTM D 1525
<b>Flammability rating, UL 94</b> at 1.3 mm and 3.0 mm	Class	<b>HB</b>	-