

# TECHNICAL DATASHEET

## PS330



### PRODUCT DESCRIPTION

High Impact Polystyrene PS 330 is manufactured by continuous mass polymerization of styrene monomer. An elastomer is incorporated during polymerization to achieve impact resistance property. It is generally opaque in color. It is a high impact strength polystyrene with high heat deflection temperature and good physical properties.

### APPLICATION

It is primarily designed for extrusion and thermoforming applications. It can be used for food packaging and dairy products.

### TECHNICAL DATA

Properties	Unit	Value <sup>(1)</sup>	ASTM Method
<b>Resin Properties</b>			
Melt Flow Rate @ 200°C & 5 kg load	g/10 min.	4.0	D-1238
Density @23°C	kg/m <sup>3</sup>	1040	D-792
Bulk Density (Method B)	kg/m <sup>3</sup>	600	D-1895
<b>Mechanical Properties <sup>(2)</sup></b>			
Tensile Strength	MPa	29	D-638
Tensile Elongation	%	50	D-638
Tensile Modulus	MPa	2353	D-638
Flexural Strength	MPa	44	D-790
Flexural Modulus	MPa	2647	D-790
Izod Impact Notched @ 23°C	J/m	110	D-256
Rockwell Hardness, L-Scale	-	67	D-785
M-Scale	-	10	D-785
<b>Thermal Properties <sup>(2)</sup></b>			
Vicat Softening Point (Rate A, 1 Kg/50°C)	°C	99	D-1525
Heat Deflection Temperature (Method B, 455 KPa, Annealed)	°C	97	D-648
Flammability Rating, UL 94 @ 1.3 mm and 3 mm (natural color)	Class	HB	-

# 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.

### 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.

### TECHNICAL 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>	-