



# SABIC® PS 100

## GENERAL PURPOSE POLYSTYRENE

### DESCRIPTION

PS 100 is general purpose Polystyrene manufactured by continuous mass polymerization of styrene monomer. It is a crystal-like, hard and brittle polymer with good flow properties and high clarity. It is designed for medium and thin wall thickness articles and gives broad processing window for molding applications.

### TYPICAL APPLICATIONS

PS 100 is recommended for the manufacture of packaging items such as plastic boxes and typical applications include cutlery, tumblers, office stationery items, jewelry boxes, medical supplies or any clear injection molded items.

### TYPICAL PROPERTY VALUES

Revision 20250110

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>POLYMER PROPERTIES</b>			
<b>Melt Flow Rate (MFR)</b>			
200°C / 5.0 kg	14	g / 10 min	ASTM D1238
<b>Load Density@ 23°C</b>	1050	kg/m³	ASTM D792
<b>Bulk Density (Method B)</b>	600	kg/m³	ASTM D1895
<b>MECHANICAL PROPERTIES</b>			
<b>Tensile Strength</b>	40	MPa	ASTM D638
<b>Tensile Elongation</b>	2	%	ASTM D638
<b>Tensile modulus</b>	2254	MPa	ASTM D638
<b>Flexural Strength</b>	72	MPa	ASTM D790
<b>Flexural Modulus</b>	3529	MPa	ASTM D790
<b>Izod impact notched at 23 °C</b>	12	J / m	ASTM D256A
<b>Rockwell Hardness, L-Scale</b>	94	-	ASTM D785
<b>M-Scale <sup>(1)</sup></b>	64	-	ASTM D785
<b>THERMAL PROPERTIES</b>			
<b>Flammability Rating, UL 94</b>			
@ 1.3 mm and 3 mm (natural color)	HB	Class	-
<b>Vicat Softening Point, (Rate A/50°C)</b>	95	°C	ASTM D1525
<b>Heat Deflection Temperature (Method B, 455 KPa, Annealed)</b>	90	°C	ASTM D648

(1) Based on Injection molded specimens

### PROCESSING CONDITIONS

Typical temperature (°C) profile for barrel : 160-210

### STORAGE AND HANDLING

PS 100 is should be stored to prevent a direct exposure to sunlight and/or heat. The storage area should also be dry and preferably don't exceed 50°C. SABIC would not give warranty to bad storage conditions which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is advisable to process PS resin within 6 months after delivery.



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