

# AMERICOLENE® PS 100-GPI

**AMERICOLENE**

## 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

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>PHYSICAL</b>			
Melt Flow Rate, 230°C/2.16 kgf (¹)	14	g/10 min	ASTM D1238
<b>POLYMER PROPERTIES</b>			
Load Density@ 23°C	1050	kg/m³	ASTM D792
Bulk Density (Method B)	600	kg/m³	ASTM D1895
<b>MECHANICAL PROPERTIES</b>			
Tensile Strength	40	MPa	ASTM D638
Tensile Elongation	2	%	ASTM D638
Tensile modulus	2254	MPa	ASTM D638
Flexural Strength	72	MPa	ASTM D790
Flexural Modulus	3529	MPa	ASTM D790
Izod impact notched at 23 °C	12	J/m	ASTM D256A
Rockwell Hardness, L-Scale	94	-	ASTM D785
M-Scale (²)	64	-	ASTM D785
<b>THERMAL PROPERTIES</b>			
Flammability Rating, UL 94			
@ 1.3 mm and 3 mm (natural color)	HB	Class	-
Vicat Softening Point, (Rate A/50°C)	95	°C	ASTM D1525
Heat Deflection Temperature (Method B, 455 KPa, Annealed)	90	°C	ASTM D648

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