

PRODUCT NAME: PS ps125
Supplier: SABIC®
Product Identification & Description

125 is general purpose Polystyrene manufactured by continuous mass polymerization of styrene monomer. It is a crystal-like, hard and brittle polymer with medium flow and high clarity. It also has medium vicat and heat deflection temperatures and makes it suitable for various applications.

Typical Applications

PS 125 is recommended for packaging items, namely jewelry and gift boxes; medical supplies such as Petri dishes, test tubes holders and specimen jars. It can also be used in capping the high impact polystyrene coextruded sheet for higher surface gloss and can be blended with impact modifier resin for clear packaging articles.

Physical Properties

Property	Typical Values	Units	Test Methods
Melt Flow Rate (200 °C / 5.0 kg)	9	g/10 min	ASTM D1238
Load Density @ 23 °C	1050	kg/m ³	ASTM D792
Bulk Density (Method B)	600	kg/m ³	ASTM D1895

Mechanical Properties

Property	Typical Values	Units	Test Methods
Tensile Strength	43	MPa	ASTM D638
Tensile Elongation	2	%	ASTM D638
Tensile Modulus	2598	MPa	ASTM D638
Flexural Strength	82	MPa	ASTM D790
Flexural Modulus	3529	MPa	ASTM D790
Izod Impact, Notched @ 23 °C	12	J/m	ASTM D256A
Rockwell Hardness (L-Scale)	95	–	ASTM D785
Rockwell Hardness (M-Scale)	63	–	ASTM D785

Thermal Properties

Property	Typical Values	Units	Test Methods
Flammability Rating (UL 94) @ 1.3 n & 3 mm (Natural)	HB	Class	UL 94
Vicat Softening Point (Rate A / 50 °C)	98	°C	ASTM D1525
Heat Deflection Temperature (Met B, 455 kPa, Annealed)	93	°C	ASTM D648

Processing Conditions

- Typical barrel temperature (°C) profile for injection grade PS 125: 170-220, Die temperature (°C): 215

Storage and Handling

PS 125 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.

DISCLAIMER

The information contained herein may include typical properties of our products or their typical performances when used in certain typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties. It is the customer's responsibility to inspect and test our product(s) in order to satisfy itself as to the suitability of the product(s) for its and its customers particular purposes.

The customer is responsible for the appropriate, safe and legal use, processing and handling of all product(s) purchased from us. Nothing herein is intended to be nor shall it constitute a warranty whatsoever, in particular, warranty of merchantability or fitness for a particular purpose.

Revision: This datasheet replaces all previous versions. **Revision Date:** Mar 2026