



SABIC® PS 325

HIGH IMPACT POLYSTYRENE FOR INJECTION MOLDING

DESCRIPTION

PS 325 is High Impact Polystyrene 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 having medium flow characteristics with high tensile and flexural strength with medium heat deflection and vicat temperatures.

TYPICAL APPLICATIONS

PS 325 has been designed for the injection molding of appliance parts, toys, furniture parts, containers, blow molded parts and structural foam applications.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate			
@ 230°C & 2.16 kg ⁽¹⁾	8.0	g/10 min	ASTM D 1238
Load Density@ 23°C ⁽¹⁾	1040	kg/m ³	ASTM D792
Bulk Density (Method B) ⁽¹⁾	600	kg/m ³	ASTM D 1895
MECHANICAL PROPERTIES			
Tensile Strength ⁽²⁾	22	MPa	ASTM D638
Tensile Elongation ⁽²⁾	50	%	ASTM D638
Tensile modulus ⁽²⁾	2157	MPa	ASTM D638
Flexural Strength ⁽²⁾	35	MPa	ASTM D790
Flexural Modulus	2353	MPa	ASTM D 790
Izod impact notched			
@ 23°C ⁽²⁾	100	J/m	ASTM D 256
Rockwell Hardness, L-Scale ⁽²⁾	60	-	ASTM D785
M-Scale ⁽²⁾	10	-	ASTM D785
THERMAL PROPERTIES			
Vicat Softening Point, (Rate A/50°C)	95	°C	ASTM D 1525
Heat Deflection Temperature (Method B, 455 KPa, Annealed)	93	°C	ASTM D648
Flammability Rating, UL 94			
@ 1.3 mm and 3 mm (natural color)	HB	Class	



- (1) Typical values; not to be construed as specification limits.
- (2) Based on Injection molded specimens.

PROCESSING CONDITIONS

Typical temperature (°C) profile for injection grade PS 325: Throat Feed Transition Metering Die Ambient 175 210 220 215

HEALTH, SAFETY AND FOOD CONTACT REGULATIONS

PS 325 is suitable for Food contact application. Detailed information is provided in relevant Material Safety Datasheet and for additional specific information please contact SABIC local representative for certificate.

STORAGE AND HANDLING

PS 325 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

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.