



SABIC® PS 825

High impact polystyrene for Injection moulding

Description.

High impact polystyrene SABIC® PS 825 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 medium flow with good tensile and flexural strength polystyrene with high Vicat and heat distortion temperature.

Applications.

It is designed for injection molding of appliance parts, furniture applications and containers.

Processing Conditions.

Typical temperature profile for injection molding grade SABIC® PS 825:

Throat: Ambient; Feed: 175 °C; Transition: 210 °C; Metering: 220 °C; Nozzle: 215 °C

Food Contact Status.

A detailed EC and FDA food contact declaration for SABIC® PS 825 is available on request.

Typical data.

Revision 20071128

Properties	Units SI	Values	Test methods
Polymer properties			
Melt flow rate (MFR) at 200 °C and 5 kg	g/10 min	8	ASTM D 1238
Density	kg/m ³	1040	ASTM D 792
Bulk Density Method B	kg/m ³	600	ASTM D 1895
Mechanical properties ¹⁾			
Tensile test ²⁾			ASTM D 638
tensile strength	MPa	20	
tensile elongation	%	45	
tensile modulus	MPa	2150	
Flexural test			ASTM D 790
Flexural modulus	MPa	2150	
Flexural strength	MPa	41	
Izod impact notched at 23 °C ³⁾	J/m	140	ASTM D 256
Thermal properties ¹⁾			
Heat deflection temperature Method B, 455 KPa, annealed	°C	93	ASTM D 648
Vicat softening temperature Rate A, 1 kg/50 °C	°C	98	ASTM D 1525
Flammability rating, UL 94 at 1.3 mm and 3.0 mm	Class	HB	-

1) Based on injection moulded test specimens

2) Speed of testing: 5 mm/min

3) Thickness of test specimens: 3 mm

The information and data contained herein are believed to be correct and given in good faith, but because of the many particular factors which are outside our knowledge and control and affect the use of product, no warranty is given or is to be implied with respect to such information, nor do we offer any warranty of immunity against infringement.