

825E

High Impact Polystyrene

Product Description

High Impact Polystyrene 825E 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 having high heat deflection and vicat temperatures.

Typical Applications

825E has been designed for extrusion and thermoforming applications and can be used for food packaging and dairy products.

Typical data

Properties	Unit	Value ⁽¹⁾	ASTM Method
Resin Properties			
Melt Flow Rate @ 200°C & 5 kg load	g/10 min.	3.5	D-1238
Density @ 23°C	kg/m ³	1040	D-792
Bulk Density (Method B)	kg/m ³	600	D-1895
Mechanical Properties ⁽²⁾			
Tensile Strength	MPa	22	D-638
Tensile Elongation	%	47	D-638
Tensile Modulus	MPa	2206	D-638
Flexural Strength	MPa	44	D-790
Flexural Modulus	MPa	2108	D-790
Izod Impact Notched @ 23°C	J/m	160	D-256
Thermal Properties ⁽²⁾			
Vicat Softening Point (Rate A, 1 Kg/50°C)	°C	100	D-1525
Heat Deflection Temperature (Method B, 1.8 MPa, Annealed)	°C	97	D-648
Flammability Rating, UL 94 @ 1.3 mm and 3 mm (natural color)	Class	HB	-

(1) Typical values; not to be construed as specification limits.

(2) Based on injection molded specimens.

Processing Conditions

Typical temperature (°C) profile for extrusion grade 825E:

Throat	Feed	Transition	Metering	Die
Ambient	185	195	205	215

Food Regulation

825E 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

Polystyrene resin 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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