

HIPS CreativePlac

TECHNICAL DATASHEET

DESCRIPTION

GS825 is a medium flow and very high impact Polystyrene. It gives good mechanical and heat resistance properties while providing with easy process-ability and short cycle time.

FEATURES

- Mediumflow HIPS
- Good mechanical and heat resistance properties
- Easy process-ability with short cycle time
- Food contact compliant

APPLICATIONS

- Wide range of injection molding applications, e.g.- office, kitchen and bathroom articles
- Food packaging as beverage cups, packaging for dairy products, sheets and disposables
- Internal parts and housings of household appliances and consumer electronics
- Toys

Property, Test Condition	Standard	Unit	Value
Rheological Properties			
Melt Mass Rate, 200 °C/5 kg	GB/T 3682.1 ISO 1133	g/10 min	5
Mechanical Properties(23°C)			
Charpy Notched Impact Strength,	GB/T 1043.1 ISO 179/1eA	KJ/m ²	11
Tensile Stress at Yield	GB/T 1040.2 ISO 527	MPa	27
Tensile Strain at Break	GB/T 1040.2 ISO 527	%	50
Flexural Strength	GB/T 9341 ISO 178	MPa	44
Flexural Modulus	GB/T 9341 ISO 178	MPa	1900
Rockwell Hardness	GB/T 3398.2 ISO 2039-2	/	85

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Property, Test Condition	Standard	Unit	Value
Thermal Properties			
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h, unannealed)	GB/T1633 ISO 306	°C	90
Heat Deflection Temperature B;(annealed 4 h/80 °C;0.45 MPa)	GB/T1634.1 ISO 75	°C	89
Electrical Properties			
Dielectric Constant (100Hz)	GB/T 31838.6 IEC 62631-2-1	/	2.5
Dissipation Factor (1 MHz)	GB/T 31838.6 IEC 62631-2-1	10 ⁻⁴	4
Dielectric Strength, Short Time, 1.5 mm	GB/T1408.1 IEC 60243-1	kV/mm	155
Relative Permittivity (100 Hz)	GB/T 31838.6 IEC 62631-2-1	/	2.5
Relative Permittivity (1 MHz)	GB/T 31838.6 IEC 62631-2-1	/	2.5
Volume Resistivity	GB/T 31838.6 IEC 62631-3-1	Ohm*m	>10 ¹⁶
Surface Resistivity	GB/T 31838.6 IEC 62631-3-1	Ohm	>10 ¹³
Other Properties			
Density	GB/T1033 ISO 1183	Kg/m ³	1060

Typical values for uncolored products

Please note that all processing data stated are only indicative and may vary depending on the individual processing complexities. Please consult our local sales or technical representatives for details.

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Processing

Linear Mold Shrinkage		GB/T17037 ISO 294-4	%	0.4-0.7
Melt Temperature Range		GB/T17037 ISO 294	°C	180-250
Cylinder Temperature	Front	GB/T17037 ISO 294	°C	220-240
	Middle	GB/T17037 ISO 294	°C	210-230
	Rear	GB/T17037 ISO 294	°C	180-210
Nozzle Temperature		GB/T17037 ISO 294	°C	220-230
Mold Temperature Range		GB/T17037 ISO 294	°C	50-75
Injection Velocity		GB/T17037 ISO 294	mm/s	200

SUPPLY FORM

GS825 is supplied as cylindrical shaped granules. It has to be kept in its original containers in a dry, cool place. Avoid direct exposure to sunlight. GS825 can also be stored in silos.

DISCLAIMER

The data mentioned above are accurate to the best of our knowledge. They are based upon reputable labs and industry standard testing methods. These are only typical values and actual product specification may deviate at industrial range. Therefore, no data in this technical data sheet shall constitute a warranty or representation regarding product features, fitness of the product for a specific purpose or application or its process-ability. GSPolymer.I disclaims all liability in connection therewith. The customer himself is required to verify whether the product is suitable for the further processing or application intended and whether the product complies with the relevant statutory requirements. Unless explicitly and individually otherwise agreed in writing, GSPolymer.I's sole and exclusive liability with respect to its products is set forth in GSPolymer.I's General Terms and Conditions for Sale.