



# Technical Data Sheet

## Phoenistyr® S2100 G20

### 20% Glass Reinforced Polystyrene – High Impact (HIPS)

Date: January, 2008

#### General

Features	High Stiffness Good impact resistance Easy processing
Appearance	Off white opaque or pigmented Pellets
Processes	Injection molding

#### Typical Compound Properties<sup>(a)</sup>

Physical	Nominal Values		Test Methods <sup>(b)</sup>
	English Units	Metric Units	
Melt Flow Rate	4.0 g/10 min.	4.0 dg/min.	ASTM D1238, 5000 g. @ 200°C
Specific Gravity	1.20	1.20	ASTM D792
Linear Mold Shrinkage	0.002 in/in	0.002 mm/mm	ASTM D955
Hardness, Rockwell Scale	R110	R110	ASTM D785
Coefficient of Linear Thermal Expansion	2.20 x 10 <sup>-5</sup> in/in °F	3.96 x 10 <sup>-5</sup> cm/cm °C	ASTM D696
Vicat Softening Point	203 °F	95 °C	ASTM D1525, Rate B, 50N load
Reinforcement Content	20±2%	20±2%	ASTM D2584

#### Mechanical

Notched Izod Impact @ 73 °F (23 °C)	1.5 ft-lb/in.	80.1 J/m	ASTM D256
Tensile Strength @ Yield	6,200 psi	42.8 MPa	ASTM D638
Elongation @ Break	3%	3%	ASTM D638
Flexural Modulus, tangent	600,000 psi	4,138 MPa	ASTM D790
Heat Deflection Temperature			
@ 66 psi (0.455 MPa)	205 °F	96 °C	ASTM D648
@ 264 psi (1.82 MPa)	190 °F	87 °C	ASTM D648

(a) Values shown represent nominal averages and are not to be construed as product specifications.

(b) ASTM methods are the latest under the Society's current Procedures. All Molded specimens are prepared by injection molding.

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