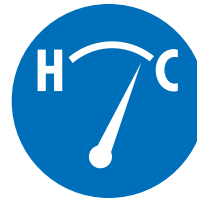


Glastherm® Grade S

- Good Hot Compressive Strength
- Low Thermal Conductivity
- Oil and Moisture Resistant
- Reduces Heat Loss
- Helps Control Temperature
- Faster Mold Startup

Glastherm Grade S is a general purpose insulation sheet with an economical combination of thermal and physical properties. Grade S is recommended for processes where the continuous operating temperature does not exceed 425°F.

It is completely asbestos-free and rugged to withstand rough handling during installation. It is easily cut and machined with standard metal working equipment. Diamond cutting tools are recommended for long life.



GLASTHERM[®]
THERMAL INSULATING MATERIALS





Glastherm® Grade S

	Procedure	English Units	Typical Values	Metric Units	Typical Values
General Information					
Part Number			3318		3318
Standard Color			Tan		Tan
Maximum Service Temp.		°F	425	°C	218
Mechanical Properties					
Flexural Strength	ASTM D 790	Psi	18,000	Mpa	124
Compressive Strength					
@75°F / 24°C	ASTM D 695	Psi	45,000	Mpa	310
@302°F / 150°C	ASTM D 695	Psi	16,000	Mpa	110
@392°F / 200°C	ASTM D 695	Psi	11,500	Mpa	79
@550°F / 288°C	ASTM D 695	Psi	10,000	Mpa	69
Compressive Modulus	ASTM D 695	Psi	1,800,000	Mpa	12,410
IZOD Impact Strength (notched)	ASTM D 256	Ft.lb./in.	8	J/cm	4.3
Electrical Properties					
Electrical Strength – Perpendicular S/T in air	ASTM D 149	Vpm	50	kV/mm	2
Flame Resistance Properties					
UL Subject 94	UL 94	0.094 in.	HB	2.4 mm	HB
Physical Properties					
Water Absorption	ASTM D 570	% by wt.	0.4	% by wt.	0.4
Specific Gravity	ASTM D 792	lbs/ft ³	115	g/cm ³	1.84
Hardness	ASTM D 785	Rockwell M	94		94
Thickness Tolerance		inches	±0.002	mm	±0.005
Coefficient of Thermal Expansion					
Across Thickness	ASTM D 696	In/In/°Cx10 ⁻⁵	7.02	10 ⁻⁶ /K	70
Across Surface	ASTM D 696	In/In/°Cx10 ⁻⁵	1.10		11
Thermal Conductivity	ASTM C 177	BTU•In/Hr•Ft ² •°F	1.8	W/m•K	0.26

Röchling Glastic Composites
 4321 Glenridge Road
 Cleveland, OH 44121 USA
 Tel: 216-486-0100
 Fax: 216-486-1091
www.glastic.com

All of the information, suggestions, and recommendations pertaining to the properties and uses of the Röchling Glastic Composites products described herein are based upon tests and data believed to be accurate; however, the final determination regarding the suitability of any material described herein for the use contemplated, the manner of such use, and whether the use infringes any patents is the sole responsibility of the user. THERE IS NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Under no circumstances shall we be liable for incidental or consequential loss or damage.

Glastic® and Glastherm® are registered trademarks of Röchling Glastic Composites. UL® is a registered trademark of Underwriters Laboratories, Inc.

©2007 Röchling Glastic Composites. All Rights Reserved. Printed in USA.