

Super Firetemp® S

High-Temperature Insulation

PRODUCT DATA SHEET

Super Firetemp S

Super Firetemp S is an inorganic, non-combustible, high-temperature insulation for use in industrial equipment and building systems. It can be used on systems operating up to 1700°F (927°C) Composed primarily of lime, silica and reinforcing fibers. This product is white, essentially dust-free, and contains no asbestos, and meets or exceeds ASTM C 656, Type II, Grade 8.

THE ADVANTAGES

- Assured Fire Resistance
- Durable
- Fconomical

APPLICATIONS

Since Super Firetemp S possesses both exceptional strength and insulation qualities, it can be readily machined into component parts of many sizes and shapes. Uses include oven and furnace walls, platen presses and structural supports.

AVAILABLE FORMS AND SIZES

| Thickness½ | ", ¾", 1", 1½" (13, 19, 25, 38 mm) |
|------------|------------------------------------|
| Sheet Size | 4' x 4' (1.22 m x 1.22 m) |
| | 4' x 8' (1.22 m x 2.44 m) |

Super Firetemp S is available with a sanded finish on one or both sides. The sanded surfaces are smooth and easy to machine.

DIMENSION TOLERANCES

| Length and Width | +/- 1/8" (3.2 mm) |
|------------------|---------------------------------------|
| Thickness | +/- 1/8" (3.2 mm) Sanded One Side |
| | . +/- 1/16" (1.6 mm) Sanded Two Sides |

LINEAR SHRINKAGE AFTER 24 HOURS AT TEMPERATURE, %

| Temperature °F (°C) | Length | Width | Thickness | Weight Loss | |
|---------------------|--------|-------|-----------|-------------|--|
| 1700°F (927°C) | 0.6% | 0.7% | 3.2% | 10.4% | |

Dimensional Shrinkage for 1" (25 mm) Thick Full Size SheetDue to Moisture from Normal to Dry, Inches (mm)

| Length | Width | Thickness | | |
|-------------|-------------|-------------|--|--|
| 0.013 (.33) | 0.009 (.22) | 0.004 (.10) | | |

THERMAL CONDUCTIVITY

| Mean Temperature | | "k" | | | | |
|------------------|-----|--------------------------|----------|--|--|--|
| ۰F | ۰C | Btu • in/(hr • ft² • °F) | W/m ∙ °K | | | |
| 400 | 204 | .97 | 0.140 | | | |
| 600 | 316 | .99 | 0.143 | | | |
| 800 | 427 | 1.05 | 0.151 | | | |



SPECIFICATION COMPLIANCE

| | I |
|--|---|
| ASTM C656 | Type II, Grade 8 |
| ASTM C795 Corrosion: Austenitic Stainless Steel | Passes |
| ASTM E136 Non-Combustible | Passes |
| Density (Avg.) | 55 pcf (881 kg/m³) |
| Maximum Recommended Continuous Service Temp. | 1700°F (927°C) |
| Flexural Strength (Avg.) | 1400 psi (9653 kPa) |
| Compressive Strength @10% deformation (Avg.) | 4200 psi (28959 kPa) |
| Screw Holding Strength (lb/screw), #8 Screw 1/2" (13 mm) Penetration 7/8" (22 mm) Penetration | 150 lbs. (68.0 kg) 400 lbs. (181.4 kg) |
| Surface Hardness (Units) (Per Type "D" Durameter) | Top Surface - 80 Bottom Surface - 80 |
| Moisture Content, Normal % of Dry Weight (Avg.) | 4% |

ADDITIONAL INFORMATION AND SDS

Please visit our website at www.jm.com/industrial

CUSTOMER SERVICE, TECHNICAL & GENERAL INFORMATION (800) 866-3234



Super Firetemp® S

High-Temperature Insulation

COMPRESSIVE STRENGTH AFTER EXPOSURE TO SOAKING HEAT FOR 24 HOURS

| Pressure 300°F(149°C) | | 400°F (204°C) 60 | | 600°F (316°C) | | 800°F (427°C) | | 1000°F (538°C) | | | |
|-----------------------|--------|------------------|-------|---------------|-------|---------------|-------|----------------|-------|-------|-------|
| psi | kPa | DF | PC | DF | PC | DF | PC | DF | PC | DF | PC |
| 500 | 3,448 | 0.008 | 0.000 | 0.008 | 0.001 | 0.052 | 0.001 | 0.050 | 0.002 | 0.056 | 0.002 |
| 1000 | 6,895 | 0.012 | 0.000 | 0.013 | 0.001 | 0.056 | 0.002 | 0.050 | 0.002 | 0.060 | 0.002 |
| 2000 | 13,790 | 0.017 | 0.001 | 0.017 | 0.002 | 0.062 | 0.002 | 0.053 | 0.002 | 0.066 | 0.002 |
| 3000 | 20,685 | 0.022 | 0.001 | 0.019 | 0.002 | 0.066 | 0.002 | 0.068 | 0.003 | 0.072 | 0.004 |
| 4000 | 27,580 | 0.028 | 0.001 | 0.022 | 0.002 | 0.076 | 0.002 | 0.076 | 0.004 | 0.079 | 0.005 |
| 5000 | 34,475 | 0.030 | 0.001 | 0.027 | 0.004 | 0.076 | 0.003 | 0.086 | 0.006 | 0.100 | 0.010 |
| 6000 | 41,370 | 0.044 | 0.002 | 0.037 | 0.004 | 0.084 | 0.014 | 0.099 | 0.011 | 0.125 | 0.014 |

DF = Deformation Under Load, inches. To convert inches to millimeters in above table, multiply by 25.4.

PC = Permanent Consolidation, inches. To convert inches to millimeters in above table, multiply by 25.4

CODE COMPLIANCE

Super Firetemp undergoes stringent tests to comply with some of the toughest fire codes in the US and Canada.





ISO 9000 CERTIFICATION

Super Firetemp S is manufactured under an ISO 9001:2000 registered quality system. This registration, along with regular independent third-party auditing for compliance, is your assurance that all our products deliver consistently high quality.

PRODUCT CERTIFICATION

When ordering material to comply with any government specification or any other listed specification, a statement of that fact must appear on the purchase order. Government regulations and other listed specifications require specific lot testing, and prohibit the certification of compliance after shipment has been made. There may be additional charges associated with specification compliance testing. Please refer to IND-CSP-3 for Certification Procedures and Charges. Call customer service for more information.

Industrial Insulation Group, LLC manufactures MinWool-1200° mineral fiber pipe, block and a variety of other insulations; Thermo-12° Gold Calcium Silicate pipe and block insulation; Microporous Blanket Insulation; Super Firetemp° fireproofing board; SprouleWR-1200° Perlite pipe and block insulation; high-temperature adhesives, and insulating finishing cement. The physical and chemical properties presented herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Numerical flame spread and smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions. Check with the Customer Service Office to assure current information. All Industrial Insulation Group products are sold subject to the Johns Manville Limited Warranty and Limitation of Remedy, email info.industrial@jm.com.

CUSTOMER SERVICE TECHNICAL & GENERAL INFORMATION

(800) 866-3234

