

# Super Firetemp<sup>®</sup> 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
- Economical

#### 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

Thickness	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 Sheet** Due to Moisture from Normal to Dry, Inches (mm)

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

# THERMAL CONDUCTIVITY

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



SUPER FIRETEMP S<sup>®</sup> OPERATING TEMPERATURE LIMIT: 1700°F (927°C)

## SPECIFICATION COMPLIANCE

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



### COMPRESSIVE STRENGTH AFTER EXPOSURE TO SOAKING HEAT FOR 24 HOURS

Pres	Pressure 300°F(149°C) 400'		400°F (204°C) 600°F (316°C)		800°F (427°C)		1000°F (538°C)				
psi	kPa	DF	РС	DF	РС	DF	РС	DF	РС	DF	РС
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<sup>®</sup> mineral fiber pipe, block and a variety of other insulations; Thermo-12<sup>®</sup> Gold Calcium Silicate pipe and block insulation; Microporous Blanket Insulation; Super Firetemp<sup>®</sup> fireproofing board; SprouleWR-1200<sup>®</sup> 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. For a copy of the Johns Manville Limited Warranty and Limitation of Remedy, email info.industrial@jm.com.

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



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