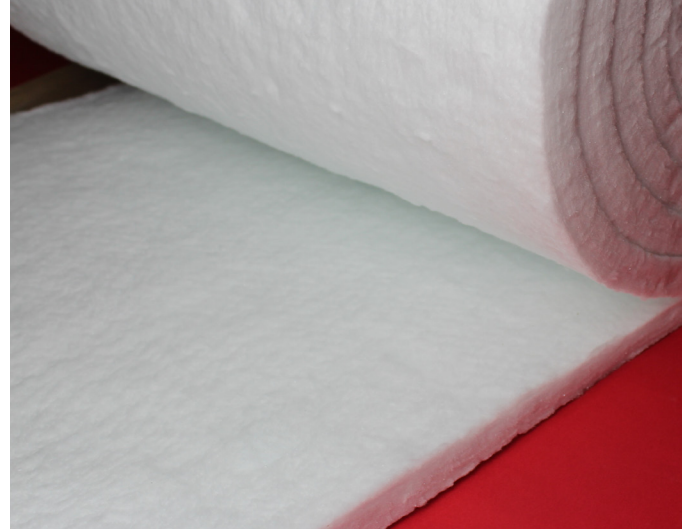




Soluble Fiber Blanket Type Z-MAG-B

General Information

ZIRCAR Ceramics' Soluble Fiber Blanket Type Z-MAG-B is a mechanically-needled, flexible blanket of Silica-Magnesia fibers. These soluble, Alkaline Earth Silicate (AES) Fibers exhibit low bio-persistence and meet European regulatory requirements (Directive 97/69/EC). In many applications Z-MAG-B can be used as a direct substitute for traditional Refractory Ceramic Fiber (RCF) insulating blankets. Z-MAG-B has good handleability and strength plus low shot content and is easily cut. Z-MAG-B exhibits good stability and low thermal conductivity in industrial applications with temperatures to 1260°C (2300°F). It is unaffected by most chemicals except hydrofluoric and phosphoric acids and concentrated alkalis.



Characteristics & Properties

Color	Bluish White
Typical Composition, wt%	
SiO ₂	72 - 77
MgO	19 - 26
Other Oxides	0 - 4
Specific Gravity (fiber), g/cc	2.54
Fiber Diameter, microns	4
Maximum Use Temperature*, °C (°F)	1260 (2300)
Melting Temperature, °C (°F)	1500 (2730)
Tensile Strength‡, ASTM 686-76, kPa (psi)	35 (5)
Compression Recovery**, % recovery	
@ 10 % compression	96
@ 30 % compression	89
@ 50 % compression	78
Linear Shrinkage‡, % 0.096 g/cc (6 pcf) blanket after 25 hrs at:	
800°C (1472°F)	0
1000°C (1832°F)	2.2
1260°C (2300°F)	3.5

ZIRCAR Ceramics, Inc.

PO Box 519
100 N. Main St., Florida, NY 10921-0519
Telephone: (845) 651-6600
E-mail: sales@zircarceramics.com

Technical Data Bulletin
Soluble Fiber Blanket Type Z-MAG-B
www.zircarceramics.com
Page 1 of 2

Soluble Fiber Blanket Type Z-MAG-B

Expected Temperature Drops

Insulating Value ^{‡‡} , 0.096g/cc (6 pcf) density					
Thickness, mm (in.)	25 (1)	51 (2)	102 (4)	203 (8)	254 (10)
Hot Face	Cold Face, °C (°F)				
650°C (1202°F)	163 (323)	114 (234)	78 (172)	56 (131)	51 (122)
870°C (1598°F)	248 (479)	174 (346)	119 (247)	82 (180)	73 (164)
1100°C (2012°F)	355 (672)	255 (494)	177 (352)	120 (250)	106 (225)

The data presented herein is intended to help the user to determine the appropriateness of this material for their application. This data is a nominal representation of this product's properties and characteristics and therefore should not be used in preparing specifications.

* Maximum use temperature is based upon irreversible linear shrinkage. ** Properties expressed parallel to thickness. ‡ Properties expressed perpendicular to thickness. ‡‡ Heat flow based on surface emissivity of 0.9, ambient temperature of 27°C (80°F) and no wind.

Suggested Applications

Substitute for RCF-containing blanket insulation products.

Primary thermal insulation in low-mass furnaces and thermal process systems operating to 1260°C (2300°F).

Backup thermal insulation in furnaces, and thermal process systems operating to high temperatures.

General high-temperature furnace repair.

Expansion joint insulation.

Thermal insulation in hot appliances.

Molten metal trough covers.

Availability of Standard Blanket

ITEM #	DESCRIPTION
D3501	Z-MAG-B, 6PCF, 24"W x 25'L x 1"T

To Order

Standard blanket: order online or specify quantity, item # and description.

Standard items are available for immediate shipment from stock. Freight Class: Insulation Material N.O.I. Class 125.

Custom thicknesses, roll width, sheet sizes and die-cut parts can be manufactured. Z-MAG-B is also available in a 0.128g/cc (8pcf) density.



ZIRCAR Ceramics, Inc.

PO Box 519

100 N. Main St., Florida, NY 10921-0519

Telephone: (845) 651-6600

E-mail: sales@zircarceramics.com

www.zircarceramics.com

Revision Date Dec. 23, 2016