# **FINEFLEX BIO™ Bulk**

FINEFLEX BIO™ Bulk is made by forming silica-magnesiacalcia-based alkaline earth silicate (AES) wool into a cottonlike material. It has excellent flexibility and thermal shock resistance.

#### Applications

- Filler material for insulating ceilings and walls of various types of kilns
- · Expansion joint filling material for ceilings and walls of various type of kilns
- Packing material for expansion joints of various types of kilns



#### Quality Characteristics

Item		TOMBO No. 5605	
Feature		Excellent flexibility and thermal shock resistance	
Color		White	
Max. heatproof temp. (°C)		1300	
Average fiber diameter (µm)		4	
Chemical composition (wt%)	SiO <sub>2</sub>	76	
	CaO+ MgO	22	
	Other	2	

<sup>\*</sup> The above figures are actual measurements made by Nichias and not standard values

#### Packaging/Packing

10kg/Polyethylene bags

- The products included in this catalog are intended for common use, including those presented in the catalog. If you intend to use any of the products in a way that requires extremely high quality and reliability such that any possible defect may directly affect the safety of human lives, quality and reliability such that any possible defect may directly affect the safety of numan lives, please make sure to consult with our company in advance and take necessary measures at your responsibility.

  Because the stated material values may vary according to actual usage environments or circumstances, please consider such figures as indications for reference.

  The content of the catalog explains the features of the products when they are used alone. When actually using the products, please start using them after testing them under the actual versue environment.
- usage environment.
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- Please be informed that, in the case where any problem involving a third party's industrial
  property right arises due to the use of any product included in the catalog, our company shall
  not be responsible for any problems other than the problems arising strictly due to reasons
- related to only such products.

  Please be aware that our company will not bear any responsibility for the following damage related to our products:

  - lated to our products:

    Damage arising due to natural disasters or accidents occurring for reasons that are not attributable to our company;

    Damage arising due to remodeling, repairing or other acts by a third party;

    Damage arising due to the willful intent or negligence of the customer or the user, or due to the improper use or use under abnormal conditions of the products;

    Damage arising due to the failure to carry out regular checkups and appropriate repairs, maintenance and part replacements, considering various conditions, such as the usage conditions, usage environment and usage period, etc., of the product;

    Indirect damage (including any operational damage, lost profits, opportunity losses, etc.) arising due to the use of or inability to use our company's product;

    Damage arising due to a situation which was unforeseeable under the technical standards at the time of the shipment of our company's product; or

  - at the time of the shipment of our company's product; or
    —Damage arising due to reasons that are not attributable to our company.



# **FINEFLEX BIO™ Blanket**

FINEFLEX BIO™ Blanket is made by continuously laminating silica-magnesia-calcia based alkaline earth silicate (AES) wool, molding it into a blanket, and needle-punch processing it.

#### Applications

- · General insulating material
- Lining material and backup material for insulating the ceilings and walls of kilns
- Expansion joint filling material for interior parts of kilns

#### Quality Characteristics

It	em	TOMBO No.	
		5615	
Color		White	
Max. heatproof temp. (°C)		1300	
Average fiber diameter (µm)		4	
Chemical composition (wt%)	SiO <sub>2</sub>	76	
	CaO+MgO	22	
	Other	2	
Coefficient of thermal contraction (%)	1100°C×8hr	1.1	
	1200°C×8hr	1.7	
	1300°C×8hr	2.0	

<sup>\*</sup> The above figures are actual measurements made by Nichias and not standard values.

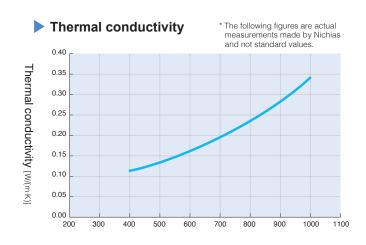
#### Standard Dimensions

Note: (1) 50mm products have a length of up to 6000mm.

TOMBO No.	Туре	Thickness (mm)	Width × length (mm)
5615	#100	12.5 25 50	600 × 1200
	#130 #160		600 × 3600
			600 × 7200 (1)

<sup>\*</sup> Please contact us for inquiries about other sizes.





Temperature (°C)
Thermal conductivity of FINEFLEX BIO Blanket (130kg/m³)

### **Precautions for handling products**

### **↑** CAUTION

Please observe the following cautions in order to maintain the intrinsic functions of the products and also to ensure that these products are used safety.

- $\bullet$  Do not use a product for any other purpose than the ones described in the catalog and speci cation, etc.
- Store products indoor at ambient temperature and humidity, and strictly avoid to get wet.
   Check the precautions for occupational health with the SDS.

Since this product contains alkaline earth silicate wool, please observe the following cautions.

Contents	<ul> <li>Inhalation of a large amount of alkaline earth silicate wool dust for a long period of time may cause damage to respiratory systems.</li> <li>Contact to alkaline earth silicate wool ber may cause itching and/or in ammation of skin.</li> </ul>			
Measures to avoid		Wear respirator for handling.     Wear work clothing with long sleeves and protective gloves as well.		
Others	There are products containing organic binder. Hazardous gas may be generated temporarily due to organic binder contained. Use ventilation system during the initial heating-up process.  For disposal, follow local regulations.			

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# NICHIAS Corporation

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<sup>\*</sup> Max. heatproof temp. is the temperature at which contraction is 4% or less after 8 hours of heating.