

## Bulk and Chopped Fiber



As the refined inorganic material, Elitewool<sup>®</sup> Functional Fibers are developed for variety of industrial and commercial applications. Elitewool<sup>®</sup> Bulks are available in variety of chemistries and diameters which can provide the better high-temperature stability and consistent properties for:

- Expansion joints
- Furnace base seals
- Tube seals
- Burner tile packing
- Chimney insulation

By using the advanced dry or wet chopping technology, Elitewool<sup>®</sup> Bulk can be chopped to Elitewool<sup>®</sup> Chopped Fiber with several grades (measured by Beaker Value<sup>(2)</sup>), to provide customers with a fiber ideally suited for their applications:

- High-temperature boards, felts and papers
- Riser sleeves for molten metal casting
- Fireplace logs and panels for gas fireplaces
- Tap out cones for molten metal applications
- Ceramics fiber candles of air clean
- Specialized vacuum forming shapes



## **Elitewool**<sup>®</sup> Functional Fiber

## **Typical Product Properties**

Product Chemistry	KW 3C02	HA 512	HZ 1982	AES P12	AES P13
Fiberized	Spun	Double Blow	Spun	Spun	Spun
Color	Light Gray	White	White	White	White
Chemistry	Kaowool	High Alumina	High Zirconia	AES	AES
Temperature Grade	1260°C	1260°C	1430°C	1200°C	1300°C
Average Fiber Diameter	2.5 to 5	2.5 to 3.5	2 to 4	2.5 to 3.4	2.6 to 3.9
	microns	microns	microns	microns	microns
<b>Chemical Composition</b>					
Al <sub>2</sub> O <sub>3</sub>	43 to 45 %	45 to 52 %	33 to 37 %		
SiO2		48 to 53 %		62 to 68 %	64 to 70 %
Al <sub>2</sub> O <sub>3</sub> + SiO <sub>2</sub>	98%				
ZrO <sub>2</sub>			13 to 15 %		
CaO				26 to 32 %	29 to 35 %
MgO				3 to 7 %	
Al <sub>2</sub> O <sub>3</sub> + SiO <sub>2</sub> + ZrO <sub>2</sub>			>=99 %		
Fe <sub>2</sub> O <sub>3</sub>		<=0.3 %	<=0.2 %		
Na <sub>2</sub> O+K <sub>2</sub> O		<=0.25 %	<=0.25 %		
Others	<=3 %			<=1 %	<=3 %
Typical Parameters					
Fiber Index <sup>(1)</sup>	45 to 55 %	45 to 55 %	45 to 55 %	62 to 70 %	65 to 70 %
Chopping	None/Coarse/Medium/Fine				
Beaker Value <sup>(2)</sup>	150-750				

Date are average results of tests conducted under standard procedures and are subject to variation. Result should not be used for specification purposes.

(1) Fiber Index is the percentage of fiberized material by weight in a fiber. Unfiberized material is called shot. (i.e., higher fiber index indicates a "cleaner" fiber). Fiber index is measured using the conical elutriation method.

(2) Beaker value is a measurement used to indicate the physical dimensions (i.e., diameters, length) of a fiber. A larger number indicates the fiber has larger physical dimensions, such as diameter and/or length.

For questions regarding the testing, or additional information about product performance or to identify the recommended product for your application, please contact with Shanghai Mint at business@mintrefractories.com.