



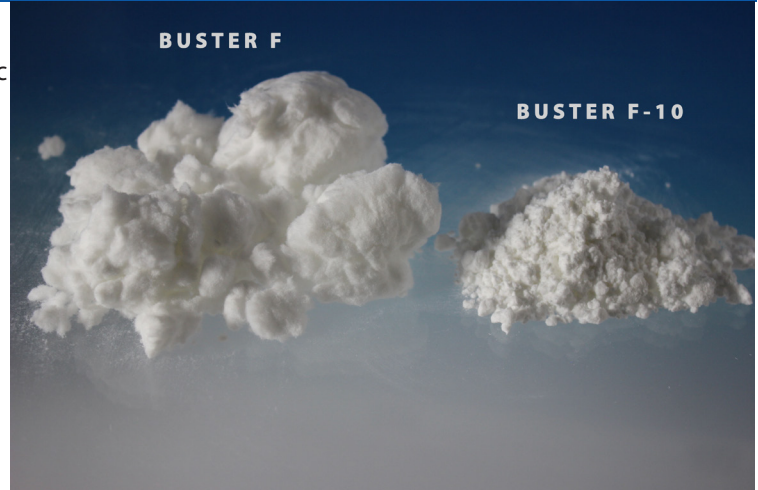
Buster Fiber

High Temperature Alumina Ceramic Bulk Fiber

Zircar Aluminum Oxide Ceramic Fiber Type Buster F is thermally stable, high alpha alumina polycrystalline ceramic fiber. Rated for temperatures to 1800 °C, they do not contain any binders or fillers that will off-gas on heat treatment.

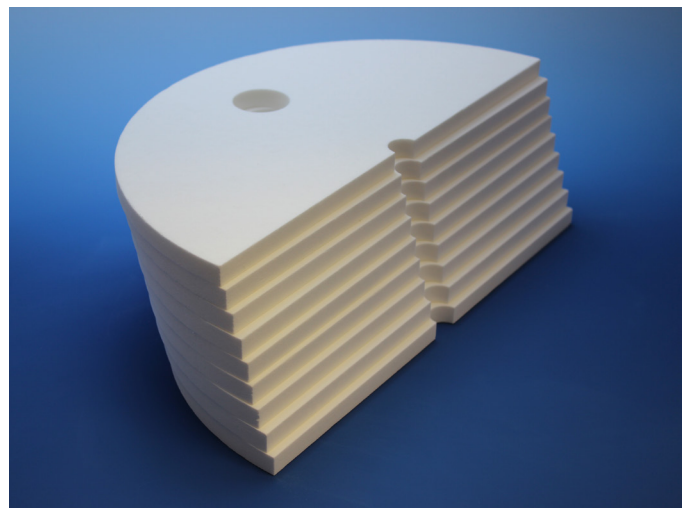
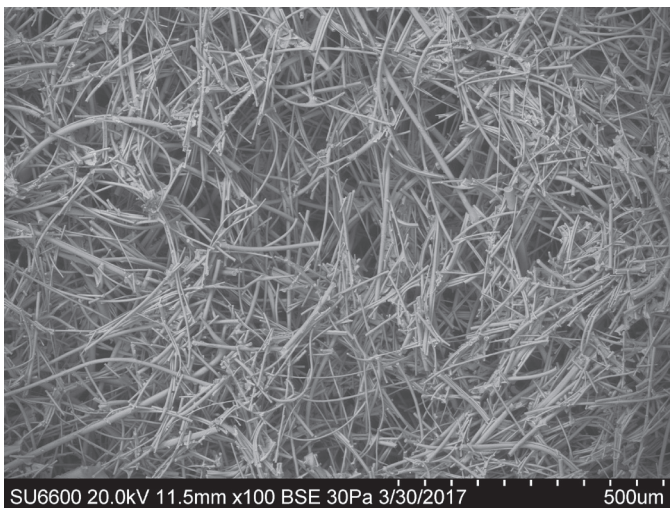
Buster fibers are 3-4 microns in diameter composed of 97% Al_2O_3 & 3% SiO_2 . The silica stabilizes by inhibiting the phase changes that make pure alumina brittle. Buster fibers are stable in vacuum, oxidizing and reducing atmospheres as well as resistant to attack in most aggressive chemical environments. The fibers also have low thermal conductivity, low mass and immunity to thermal shock.

Buster fibers are excellent reinforcement materials to add to Buster cement and other ceramic coatings. They are useful as loose fill insulation or as packing material in furnace cavities where heat leakage might be a problem, especially around sight tubes, ports, expansion joints, masonry cracks, or any under insulated area encroaching on the hot face.



Buster F has a nominal density of 5 lb/ft³. Buster F has the longest fiber length at 2-4 inches and will vacuum form to a density of 10 - 15 lb/ft³ in water.

Buster F-10 has a nominal density of 10 lb/ft³ and shorter fiber lengths of 1/8 - 1/4 inches. Buster F-10 will vacuum form to 20 - 25 lb/ft³.



Buster fibers are used by **Zircar** to manufacture our aluminum oxide vacuum formed product lines, Buster A and Buster M. Buster Fiber will produce a light weight rigid shape with a uniform density when vacuum formed from a water slurry.



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Properties & Characteristics

Properties (Nominal)	Buster F	Buster F-10
Bulk Density, lb/ft ³ (g/cm ³)	5 (0.08)	10 (0.16)
Fiber Density, lb/ft ³ (g/cm ³)	212 (3.4)	212 (3.4)
Melting Point, °C (°F) ⁽¹⁾	2038 (3700)	2038 (3700)
Maximum Use Temperature, °C (°F) ⁽¹⁾	1700 (3092)	1700 (3092)
Shrinkage %, 1 hour at 1538 °C (2800 °F)	2	2
Approximate Fiber Length, mm (in.)	50-100 (2-4)	3-6 (1/8-1/4)
Mean Fiber Diameter, microns	3.5	3.5
Chemical Composition (Nominal)		
Oxide	Wt%	
Al ₂ O ₃	97	
SiO ₂	3	
Organics	0	
Alpha Alumina	>50	

Applications

FILLS CAVITIES

Can be placed into cavities as loose fill insulation or used as furnace packing.

REINFORCEMENT

It can be added to Buster Cement and used as a coating or as a filler for holes, bonding of matched surfaces, and repairing cracks and openings in furnace walls composed of alumina insulation.

THERMAL INSULATION

Buster Fiber can be used as thermal insulation in many industrial furnace applications. It is ideal for applications where an insulation exhibiting low shrinkage and thermal shock is required.

FORMS RIGID SHAPES

Can be vacuum formed into rigid shapes or as an additive in ceramic fiber vacuum formed products to improve refractoriness.

Standard Product Sizes & Ordering

Size	Item Number	
	Buster F	Buster F-10
1 Kg	GF001	GF003
10 Kg	GF002	GF004

To Place an Order

Call: 845-651-3040

email: sales@zircarzirconia.com

store: www.zircarzirconia.com/store



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