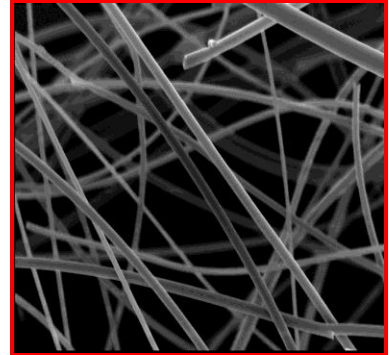


ALTRA®

Polycrystalline Alumina Bulk Fiber

ALTRA® bulk alumina fibers are high purity, low shot content polycrystalline materials for refractory insulation applications up to 1800°C (3000°F).

ALTRA® fibers are manufactured via a sol-gel solution process to control fiber diameter and non-fibrous shot content. Controlled firing yields the optimal crystalline phase for maximum resistance to thermal shrinkage at elevated temperatures. Two grades are available for a broad range of applications:



- ▲ **ALTRA® B72:** mullite composition, superior thermal shrinkage resistance, compressibility and resiliency. Preferred composition for vacuum forming of boards for oxidizing and neutral atmospheres up to 1800°C.
- ▲ **ALTRA® B97:** hi-alumina composition, used for vacuum forming boards with excellent resistance to reduction in dry hydrogen and vacuum atmospheres up to 1650°C. Preferred composition for vacuum forming of boards for resistance to chemically induced shrinkage from direct contact with most vapors and solids, including alkalis, acids, and iron oxides.

Properties	ALTRA® GRADE			
	B 72	B 97	B97LA	B97HA
Typical Composition				
Al ₂ O ₃	> 71	> 96	> 96	> 96
SiO ₂	< 28	< 3.5	< 3.5	< 3.5
Fe ₂ O ₃	< 0.1	< 0.1	< 0.1	< 0.1
Other oxides	< 0.2	< 0.2	< 0.2	< 0.2
Crystalline Phases				
α-Alumina	< 5%	30 to 42%	< 10%	> 42%
Mullite	> 60%	< 5%	-	< 10%
Fiber Resiliency				
Settlement Height ml	200 to 250	150 to 180	180 to 200	150
Slurry Density g/cm ³	0.025	0.028 - 0.033	0.025 - 0.028	0.033
Shot Content > 75 Microns (> .003")				
	< 1%	< 1%	< 1%	< 1%
Fiber Diameter μm	2 to 4	2 to 4	2 to 4	2 to 4

Also available chopped or milled to custom fiber lengths.

The test data shown are based on average results on production samples and are subject to normal variation on individual tests. The test data cannot be taken as minimum or maximum values for specification purposes. ASTM test procedures used when applicable.