ADVANCED MATERIALS
BY VIVARA SCIENTIFIC

TECHNICAL DATA SHEET
TDS-GM-004 · Rev B · Oct 2026

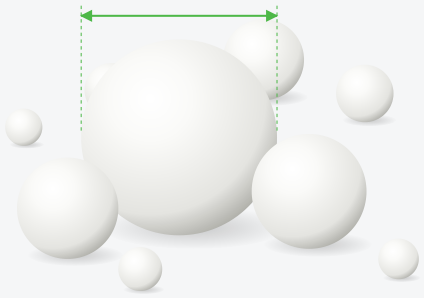
GRINDING MEDIA

Alumina Beads

High-alumina ceramic ($Al_2O_3 \geq 92$ %)

The general-purpose, low-cost workhorse for lab and pilot ball milling. Hard and wear-resistant, and the natural choice wherever trace alumina pickup is acceptable.

3.60 g/cm³	11 GPa	1050 N
DENSITY	VICKERS HARDNESS	CRUSH STRENGTH



Stocked Ø 3mm · 5mm · 10mm · 15mm

CHEMICAL COMPOSITION

Al_2O_3	≥ 92 %
SiO_2	≤ 5 %
Others	≤ 3 %

Mass fraction, specification limits.

DENSITY VS. AMV MEDIA

YSZ	6.00
Ceria zirconia	5.95
Zirconium silicate	4.08
ZTA	3.70
Alumina	3.60

g/cm³, minimum values.

PHYSICAL PROPERTIES

Density	≥ 3.60 g/cm³
Vickers hardness	≥ 11 GPa
Crushing strength	≥ 1050 N
Wear loss	≤ 1.5 g/kg·h
Sphericity	≥ 95 %
Water absorption	≤ 0.01 %
Color	White

STOCKED SIZES

Ø 3 mm	1 kg pack
Ø 5 mm	1 kg pack
Ø 10 mm	1 kg pack
Ø 15 mm	1 kg pack
Other sizes	On request

Bulk quantities and custom size ranges available. Ask us for a quote.

TYPICAL APPLICATIONS

- General lab and pilot ball milling of oxides, minerals and glazes
- Mixing and deagglomeration of ceramic powders
- Processes where alumina is already a component, so pickup is harmless

USE & CARE

Pair with: Alumina planetary jars (A grade) or roller milling jars.

Rinse new media before first use to remove fines. As a starting point for planetary milling, fill about one third of the jar with media, one third with sample and leave one third free.

Values are specification limits (minimum or maximum) and typical results for guidance only; they are not a warranty of performance in a specific process. Customers should confirm suitability for their application. Specifications may change without notice; the current version is on our website.

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