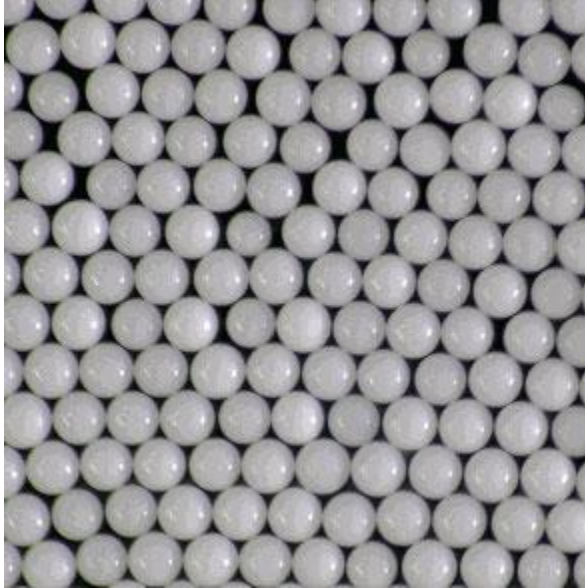


All technical data presented represent typical results, unless stated otherwise as min/max values. No guarantee is made that material will meet exactly the values shown.

Alumina Beads / Grinding Media



High purity alumina beads for grinding and dispersing media



0.2mm

The high purity alumina beads that we developed are characterized by excellent abrasion resistance and high purity.

Features

1. Excellent abrasion resistance

When the high hardness ceramics is ground, abrasion resistance is higher than the zirconia beads.

2. High purity

The purity of the alumina beads is 99.99% or more.

When grinding, no contamination other than alumina.

It is suitable for grinding and dispersion of the electronic material that dislikes mixing the radioisotope.

3. Excellent corrosion resistance

It is excellent in corrosion resistance to the acid and the alkali.

There is no performance deterioration to the warm water.

4. Energy saving of grinding and dispersion

The density of alumina is 2/3 of the zirconia, and the filling weight to the mill is 2/3.

In addition, there is a possibility that the consumption energy when grinding can be decreased.

Size of beads

φ0.1mm, φ0.2mm, φ0.3mm, φ0.4mm, φ0.5mm

Density

Apparent density : 3.9g/cm³

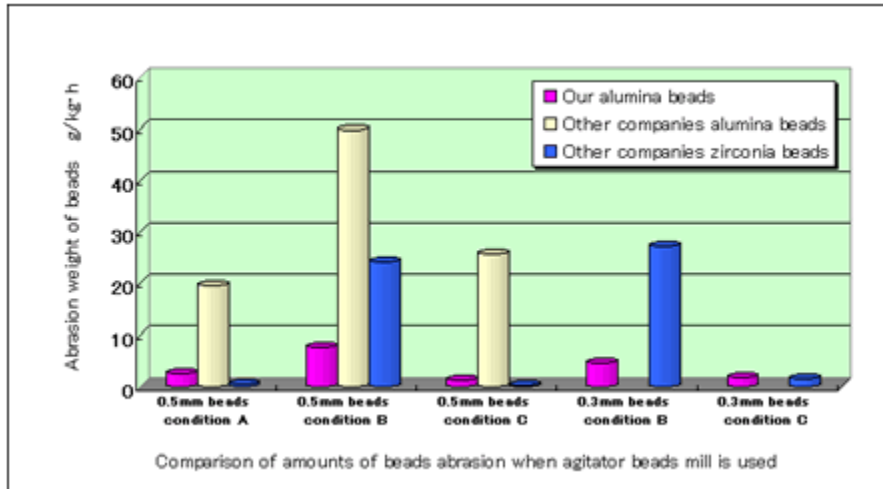
Filling density : 2.4g/cm³

Typical purity data

Element	Na	K	Si	Fe	Mg	Ca	Cr
Content / ppm	8	4	10	8	3	3	2

Analysis by ICP (U 4ppb or less, Th 5ppb or less)

Abrasion resistant test



Mill type: Agitator beads mill

Grinding material: a-alumina powder or aluminum hydroxide (Gibbsite)

Concentration of slurry: 60% in case of a-alumina powder
15% in case of aluminum hydroxide

Rotor speed: 7.8m/s, 12.6m/s

Slurry temperature: 20 - 30

Test condition A

Use slurry : No grinding material, only water

Rotor speed : 7.8m/s

Test condition B

Use slurry : Alumina slurry of 60%

Rotor speed : 12.6m/s

Test condition C

Use slurry : Aluminum hydroxide slurry of 15%

Rotor speed : 12.6m/s

Application: Advanced ceramics, Specialty materials

Product type: Consumables

Production scale: Lab, Pilot, Commercial

Search tags: Advanced Ceramics, Alumina, Al₂O₃, Grinding