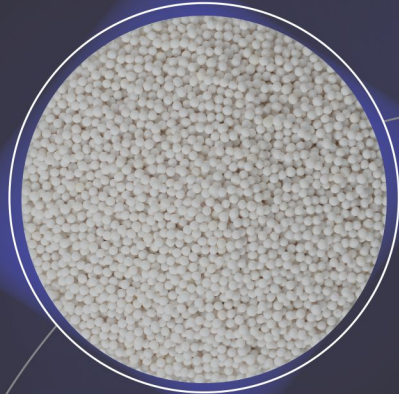




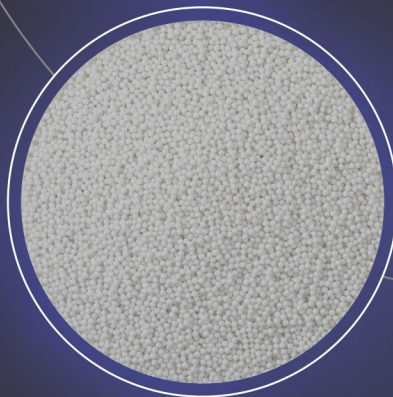
Duralox[®] 92W



High Density High Alumina Ceramic Micro Beads

Are

- Smooth • Tough
- Sapphire hard
- Chemically inert • Non-oxidising
- Non-discolouring • Non-rusting



JYOTI CERAMIC INDUSTRIES PVT. LTD.

Duralox 92W spherical micro beads are produced from proprietary formulation: A high alumina ceramic composite containing 92% alpha alumina crystals having a low percentage of silica in its body composition.

Duralox 92W beads are tough & sapphire hard, measuring 9 on Moh's scale. Dense in structure, abrasive in nature and resistant to abrasion wear, they can withstand high temperature and are chemically inert, non-porous, gas tight, non-toxic, non-magnetic, non-radioactive, free of voids with smooth surface finish.

Duralox 92W micro beads have proven to be ideal for shot peening, de-burring and polishing of sheet metal blanks, cast molded ferrous/non-ferrous components, precious metal ornaments etc.

Duralox 92W beads are found to be excellent as fillers to form wear resistant coating materials in epoxy resin based adhesive compounds. They form a tough, durable, abrasion resistant coating on complex surfaces such as scrapper blades, piping, chutes, hoppers, material passing passage etc. when placed with an epoxy matrix. These coatings have a huge potential in ship building, chemical, food and beverage industries as they form tough, chemically inert, non-slippery, wear resistant flooring. In addition, they also provide outstanding service as light weight and abrasion resistant lining.

Duralox 92W micro beads are excellent to use as a media for heat storage and heat transfer in fluidised beds.

Due to their abrasive nature, **Duralox 92W** micro beads are generally not recommended for any bead milling dispersion applications.

Standard fraction range sizes of beads:

- Ø 0.4 to Ø 0.7mm
- Ø 0.7 to Ø 1.2mm
- Ø 1.2 to Ø 1.7mm
- Ø 1.7 to Ø 2.4mm
- Ø 2.4 to Ø 2.8mm
- Ø 2.8 to Ø 3.3mm

We offer custom fraction size beads, if found feasible to produce them.

Physical & Chemical Properties of Duralox 92W Ceramic Material

Physical Properties

Composition	: 92% Al ₂ O ₃
Colour	: White
Average crystal size	: 2-10 Microns
Specific gravity	: ≥ 3.70
Porosity	: Gas tight
Water absorption	: Nil
Hardness on Moh's scale	: 9+
Hardness on Vicker's scale (Hv ₁₀)	: 1300
Compressive strength (20°C)	: 2,000 Mpa
Crushing strength (Ø 2.0mm bead)	: 90-100 kgf
Flexural strength (25°C)	: 3200 kg/cm ²
Modulus of elasticity	: 2.7 x 10 ⁶ /cm ²
Fusion temperature	: > 1900°C (3450°F)
Maximum use of temperature (No load condition)	: > 1400°C (2550°F)
Co-efficient of thermal expansion (20°C to 1000°C)	: 7.6 x 10 ⁻⁶ /°C

Chemical Properties

Al ₂ O ₃	: 92.3%
SiO ₂	: 2.55%
MgO	: 2.45%
CaO	: 2.10%
Na ₂ O	: 0.29%
BaO	: 0.13%
Fe ₂ O ₃	: 0.07%
TiO ₂	: 0.06%
Others	: 0.05%



Stackable HDPE containers with polythene lining:
Net Wt. 25 kgs and Gross Wt. 25.8 kgs



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