

## Technical Data Sheet

### ALUMINA BALL TECHNICAL DATA

#### 1. Chemical composition

Al <sub>2</sub> O <sub>3</sub> + SiO <sub>2</sub>	Min 91.5% WT	CaO	Approx.0.39%
SiO <sub>2</sub>	67.4% WT	MgO	Approx.0.51%
Leach-able Iron	Max 0.1% WT	Na <sub>2</sub> O	Approx.1.18%
TiO <sub>2</sub>	Approx. 1.18%	K <sub>2</sub> O	Approx.3.28%

#### 2. Specific properties

Size	Particle Density	Apparent Porosity By Volume	Apparent Porosity By Weight
6mm±1.0mm	2.3 gm/cc	Max 1%WT	Max 0.4%WT

#### 3. Typical Physical Properties

Material hardness (MOHS SCALE)	Min 6.5, without any spalling & fracture	
Specific heat, 30-100°C	J/kg K	850-1050
Thermal conductivity 30-100°C	W/Mk	19-35
Coefficient of thermal expansion 30-600°C	10 <sup>-6</sup> K <sup>-1</sup>	7-9
Heat resistance	Up to °C	≥1650
Attrition loss		<1%WT
Working temperature	Up to °C	≤ 982
Leach-able sulfur & chloride		Nil

## MATERIAL SAFETY DATA SHEET

The recipient of this safety data is responsible for passing the safety information on so that it reaches the ultimate user who may come in contact with the material.

### CHEMICAL PRODUCT NAME AND COMPANY IDENTIFICATION:

TRADE NAME : ALUMINA CERAMIC BALL  
CHEMICAL NAME : Not available  
SYNONYMS : Aluminum Silicate, Chemical Stoneware, Inert Ceramic Ball.  
MANUFACTURER : Extol Hydro Technologies – Ltd  
PLACE OF ORIGIN : China

MSDS PREPARED BY: **Extol Hydro Technologies Inc.**  
13020 S. Ridgewood, Palos Park  
Il. 60464, USA  
Tel: +1-708-717-4371  
Fax: +1-708-598-8224  
[www.extolhydro.com](http://www.extolhydro.com)  
[sales@extolhydro.com](mailto:sales@extolhydro.com)

### COMPOSITION:

AL<sub>2</sub>O<sub>3</sub> + SiO<sub>2</sub> (% wt) : ≥91.5%  
SiO<sub>2</sub> (% wt) : ≤67.4%  
Fe<sub>2</sub>O<sub>3</sub> (% wt) : ≤0.1%  
MgO : ≤0.51%  
CaO : ≤0.39%  
Na<sub>2</sub>O : ≤1.18%  
K<sub>2</sub>O : ≤3.28%  
TiO<sub>2</sub> : ≤1.18%

**PHYSICAL DATA:**

**PHYSICAL STATE** : Solid

**APPEARANCE** : Balls

**ODOR** : Odorless

**SOLUBILITY (IN WATER):** Insoluble

**BOILING POINT (°C)** : Not applicable

**FREEZING POINT (°C)** : Not applicable

**MELTING POINT (°C)** : Not applicable

**FLAMMIBILITY** : Not flammable

**FIRE FIGHTING** : Cool fire – exposed containers with water spray

**SIZE**

Diameter $\Phi$	3	6	8	10	13	16	20	25	30	38	50	65	75
Diameter permitted tolerance	±1.0			±1.5				±2.0			±3.0		
Remarks: Any technological index can be made as per requires													

**STABILITY REACTIVITY DATA:**

No flammable

**Stability** : Stable

**Hazardous Polymerization** : Will not occur

**TOXICOLOGICAL INFORMATION:**

**IMMEDIATE EFFECT: No data available**

**CARCINOGENICITY** : No data available

**MUTAGENICITY** : No data available

**EPIDEMIOLOGY** : No data available

**TERATOGENICITY** : No data available

**REPRODUCTIVITY** : No data available

**NEURTOXICITY** : No data available

**HEALTH HAZARD DATA:**

**PRIMARY EXPOSURE ROUTE** : Suspended solid particles in inhaled air.  
**PRECAUTIONS IN USE** : Eyes, nose and throat may be irritated by dust.  
**Threshold Limit Value** : 10 mg/m (nuisance particulate)

**FIRST AID MEASURES:**

**SKIN CONTACT** : Remove contaminated clothing and shoes.  
Wash exposed areas with soap and water.  
Get medical attention.

**EYE CONTACT** : Flush eyes with water for at least 15 minutes.  
Get medical attention.

**INGESTION** : Call a physician immediately.  
Only induce vomiting if directed by a physician.

**INHALATION** : Remove to fresh air.  
If breathing has stopped, give artificial respiration.  
Get medical attention.

**NOTES TO PHYSICIAN** : No data available.

**SPILL OR LEAK PROCEDURES:**

**No Special precautions.**

**Watch footing if material is loose on walking surface.**

**HANDLING INFORMATION:**

**DISPOSAL : Landfill in accordance with local regulations.**

**HANDLING : Avoid contact with skin, eyes, and clothing**  
**Avoid breathing product vapors and mists**  
**Do not take internally**  
**Wash thoroughly after handling this material**  
**Use this material only with adequate ventilation**

**STORAGE : Keep container closed when not in use**  
**This material should be stored in a dry area**  
**Protect against physical damage**

**TRANSPORTATION INFORMATION:**

**D.O.T. SHIPPING NAME : Not D.O.T. regulated**

**D.O.T. HAZARD CLASS : None**

**DOT ID NUMBER : UN N/AP**

**DOT PACKING GROUP : None**

**DOT RQ : N/AP**

**OTHER : Labels required: None**

**IMDG HAZARD CLASS : None**

**ICAO HAZARD CLASS : None**

**Disclaimer:**

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