

## SAFETY DATA SHEET

Revision date:2016/03/29

**1. PRODUCT AND COMPANY IDENTIFICATION**

Product Name : High purity alumina beads

Name of Manufacturer :

Taimei Chemicals Co., Ltd.

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Research and Technology Department TEL : +81-265-72-4151 FAX : +81-265-74-1312

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**2. HAZARDS IDENTIFICATION**GHS Classification <sup>1)</sup>

Health Hazards

Aluminum Oxide :

Specific Target Organ Systemic Toxicity / Single exposure : Category 3

Specific Target Organ Systemic Toxicity / Repeated exposure : Category 1

※ Hazards other than the above, "Not applicable", "Not classified" or "can not be classified".

GHS Label Elements

Pictogram



Signal Word : Danger

Hazard statements : Causes damage to organs through prolonged or repeated exposure.  
May cause respiratory irritation.

Precautionary statements

【Prevention】 : When using, do not drink and eat and smoke.

Do not breathe the dust.

During handling, Wear protective gloves/protective clothing/eye protection/face protection.

After handling, wash face and hands with water, gargle with water.

【First aid】 : If Inhaled : After rinsing the throat with water, move to fresh air.

If discomfort persists, consult a physician.

If in Eyes : Rinse cautiously with water for several minutes.

Remove the contact lenses, it will be washed until stimulus is eliminated.

If eye irritation persists, get medical advice/attention.

If on Skin : Wash with soap and water. If there is skin irritation, receive medical attention.

If Ingested : After rinsing the mouth, drink water. If you feel unwell, get immediate medical advice/attention.

【Storage】 : The vessel was sealed, please keep locked.

【Disposal】 : Dispose of contents/container in accordance with local/regional/national/international regulation.

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### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Substance / Mixture : Chemical Substance  
Chemical Name : Aluminum Oxide (synonyms: Alumina)  
Formula :  $Al_2O_3$   
Concentration : Min 99 %  
CAS No. : 1344-28-1

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### 4. FIRST-AID MEASURES

Inhalation : After rinsing the throat with water, move to fresh air.  
If discomfort persists, consult a physician.  
Skin contact : Wash with soap and water.  
If there is skin irritation, receive medical attention.  
Eye contact : Rinse cautiously with water for several minutes. Remove the contact lenses, it will be washed until stimulus is eliminated.  
If eye irritation persists, get medical advice/attention.  
Ingestion : After rinsing the mouth, drink water.  
If you feel unwell, get immediate medical advice/attention.

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### 5. FIRE-FIGHTING MEASURES

Extinguishing media : Use any means suitable for extinguishing surrounding fire.  
Unsuitable extinguishing media : None.  
Special hazards : None.  
Protection of fire fighters : Firefighters should wear suitable protective equipment.

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### 6. ACCIDENTAL RELEASE MEASURES

Protective equipment and emergency procedures :  
When performing the process, Wear suitable protective equipment (section 8).  
Environmental precautions :  
Prevented from flowing into the rivers.  
Please contact when impact on humans and aquatic life is a concern.  
Removal measures :  
Collect in empty appropriate container.  
In the case of a small amount, should be discarded after neutralization with slaked lime, calcium carbonate, soda ash etc.  
Prevention of secondary disaster : Please covered with a sheet for shatterproof.

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### 7. HANDLING AND STORAGE

Handling  
Technical measures : Please adequate ventilation by the overall ventilation and local exhaust.

- Safe handling advice : Wear suitable protective equipment (section 8).  
Do not breathe the dust.
- Hygiene measure : After handling, wash face and hands with water.
- Storage
- Conditions for safe storage : The vessel was sealed, please keep locked.
- Safe packaging materials : Use a sealable container.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Limit Value

Japan Industry Hygienic Society <sup>2)</sup> : Applicable the first-class dust as Alumina  
Inhalation dust = 0.5 mg/m<sup>3</sup> , Total dust = 2 mg/m<sup>3</sup>

ACGIH <sup>3)</sup> : As insoluble Aluminum salts TWA(Time Weighted Average) = 1 mg/m<sup>3</sup>

Engineering measures : Install the following equipment as necessary.  
(Local exhaust ventilation, general ventilation, hand wash, eyewash equipment)

### Protective Equipment

- Respiratory protection : Wear a dust mask.
- Hand protection : Wear impervious gloves.
- Eye protection : Wear safety glasses.
- Body protection : Wear a cloth of the protection against dust.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : White spherical particles
- Odor : None
- pH : No data available
- Melting point : 2000~2100 °C
- Boiling Point : About 3000 °C
- Flash point : Incombustibility
- Flammability or Explosive Limits : No data available
- Vapor pressure : No data available
- Specific Gravity : 3.9
- Solubility : Insoluble in water
- n-Octanol / water partition coefficient : No data available
- Spontaneous ignition temperature : Incombustibility

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## 10. STABILITY AND REACTIVITY

- Reactivity : None
- Chemical stability : Chemically stable
- Hazardous reactions possible : None
- Conditions to avoid : The occurrence of dust, spreading.
- Incompatible materials : None
- Hazardous decomposition products : None

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**11. TOXICOLOGICAL INFORMATION**

Acute Toxicity	: LCLo = 357 mg/m <sup>3</sup> (mouse 60 days, inhalation) <sup>4)</sup>
Skin Corrosion/Irritation	: No data available
Serious Eye Damage/Eye Irritation	: No data available
Respiratory or Skin sensitization	: No data available
Germ cell mutagenicity	: No data available
Carcinogenicity	: No data available
Reproductive toxicity	: No data available
Specific target organ toxicity (single exposure)	: May cause respiratory irritation.
Specific target organ toxicity (repeated exposure)	: May cause damage to organs through repeated exposure.
Aspiration hazard	: No data available

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**12. ECOLOGICAL INFORMATION**

Ecotoxicity	: No valid information
Persistence / degradability	: None
Bioaccumulation	: No data available
Mobility in soil	: None
Harmful to the Ozone layer	: No data available

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**13. DISPOSAL CONSIDERATIONS**

Residual waste	: Avoid release to the environment. When disposing, please follow all regulations in your country.
Pollution container and packaging	: After washing with water, should be disposed of in accordance with all regulations of your country.

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**14. TRANSPORT INFORMATION**

See Section 7. HANDLING AND STORAGE.  
Avoid rough handling or dropping.  
Follow all regulations in your country.  
UN number : None.  
IATA/ICAO : Not Restricted

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**15. REGULATORY INFORMATION**

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.  
After referring to this SDS, please managing this product to conforms against all regulations of your country or region.

**16. OTHER INFORMATION****REFERENCES**

- Japanese Industrial Standards Z 7253 (2012)
- 1) GHS Classification , Announced officially by National Institute of Technology and Evaluation (Japan).
- 2) Japan Industry Hygienic Society, Industrial Medicine.
- 3) ACGIH - Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices.
- 4) Our technical data.

**IMPORTANT NOTE:**

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