

MATERIAL SAFETY DATA SHEET

Revision date: 2007/05/01

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name : High purity alumina beads

Manufacturer's Name :

Taimei Chemicals Co., LTD.

4150, Minami-minowa-mura, Kamiina-gun, Nagano-ken, Japan



TEL : 0265-72-4151

Tokyo Sales office TEL : 03-3563-2491

FAX : 0265-74-1312

FAX : 03-3563-2498

2. HAZARDS IDENTIFICATIONGHS Classification : Announced officially. (IDNo.738 Aluminum Oxide) ¹⁾

Hazard communication elements	Classification	Symbol	Signal word	Hazard statement
Specific Target Organ Systemic Toxicity /Single Exposure	Category 3 (Respiratory tract; Irritation)		Warning	May causes irritation to organs.
Specific Target Organ Systemic Toxicity /Repeat Exposure	Category 1 (Lungs ;Inhalation)		Danger	Causes damage to organs through prolonged or repeated exposure.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Classification: Mono-product

Chemical Name : Aluminum Oxide (synonyms: Alumina)

Content : 99.99%

Formula : Al₂O₃

CAS No. : 1344-28-1

4. FIRST-AID MEASURES

Inhalation : In case of discomfort, remove to a ventilated area.
If discomfort persist, consult a physician.

Skin contact : Flush skin with water.

Eye contact : Flush eyes with water and carefully rinse eyelids.

Ingestion : Wash mouth with water. If discomfort persists, consult a physician.

5. FIRE-FIGHTING MEASURES

Extinguishing media : Incombustible.

Hazardous combustion products : N. A.

6. ACCIDENTAL RELEASE MEASURES

In case of leakage, cover the beads by sheet to prevent from dispersing, sweep up and place it in a container.

7. HANDLING AND STORAGE

Handling precautions : Wear a dust respirator, to avoid inhalation.

Handle, dust not to be generated.

Storage conditions : Store in closed containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Threshold Limit Value :

Japan Industry Hygienic Society ²⁾ : Applicable the first-class dust as Alumina

Inhalation dust = 0.5 mg/m³ , Total dust = 2 mg/m³

ACGIH ³⁾ : Aluminum Oxide TWA(Time Weighted Average) = 10 mg/m³

Protective Equipment: Install a dust collector and a washing equipment in a working area.

Personal Protective Equipment

Respiratory Equipment : Wear a dust respirator.

Gloves : Wear impervious gloves.

Eye Protection : Wear goggles.

Clothes : Wear a cloth of the protection against dust.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor : White beads , Odorless.

Specific Gravity : 3.9

Solubility : Insoluble in water. Insoluble in strong acid and strong alkali
At atmospheric pressure.

10. STABILITY AND REACTIVITY

Stability and Reactivity : Chemically stable, not reactive.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity : LCLo 357 mg/m³ (mouse 60 days, inhalation) ⁴⁾

Skin Corrosion/Irritation : N.A.

Serious Eye Damage/Eye Irritation : N.A.

Respiratory or Skin Sensitization : None.

Germ Cell Mutagenicity : N.A.

Carcinogenicity : N.A.

Reproductive toxicity : N.A.

Specific Target Organ Systemic Toxicity : See No.2

12. ENVIRONMENTAL INFORMATION

No information available.

13. DISPOSAL CONSIDERATIONS

Dispose of waste in accordance with federal, state, or local regulations.

14. TRANSPORT INFORMATION

See No.7 HANDLING AND STORAGE. Caution against break of package.

15. REGULATORY INFORMATION

Industrial Safety and Health Law. 57-2 (No.189 Aluminum Oxide)

16. OTHER INFORMATION

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REFERENCES

- 1) GHS Classification , Announced officially by National Institute of Technology and Evaluation (Japan)
- 2) Japan Industry Hygienic Society, Industrial Medicine, Vol.47, p.150~177, (2005).
- 3) ACGIH - Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices (2004).
- 4) Industrial Toxicology Handbook (enlarged edition), Isiyaku Publication (1986).

N.A. : Not Applicable.