SAFETY DATA SHEET

Revision date:2022/03/01

1.CHEMICALS AND COMPANY IDENTIFICATION

Name of chemical : High purity alumina beads

Name of manufacturer :

Taimei Chemicals Co., Ltd.
3685-2, Minami-minowa-mura, Kamiina-gun, Nagano-pref, Japan
TEL : +81-265-72-4151 FAX : +81-265-74-5100
Tokyo Sales office TEL : +81-3-3563-2491 FAX : +81-3-3563-2498

2.HAZARDS IDENTIFICATION

In the GHS classification it is as follows, but it is not Dangerous Goods.
However, please take safety measures.

GHS Classification of chemicals [1)]

Health Hazards

Specific Target Organ Systemic Toxicity / Single exposure : Category 3

Specific Target Organ Systemic Toxicity / Repeated exposure : Category 1

※ Classification categories other than the above are "Not applicable" or "Classification not possible".

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.
Use only outdoors or in a well-ventilated area.
Do not breathe the dust.
When handling, wear protective gloves/dust mask/eye protection.
After handling,wash face and hands with water,gargle with water.

【First aid】 : If inhaled : Gargle with water and move to a place with fresh air to rest.
If you feel unwell, seek medical advice.

If in eyes : Rinse cautiously with water for several minutes.
Remove the contact lenses, it will be washed until irritation is eliminated.
If eye irritation persists, seek medical advice.

If on skin : Wash with soap and water.
If there is skin irritation, seek medical advice.

If ingested : After rinsing the mouth, drink water.
If you feel unwell, seek medical advice.

【Storage】 : Seal the container and store it in a well-ventilated place with a key.

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

3.COMPOSITION / INFORMATION ON INGREDIENTS

Chemical substance / Mixture : Chemical substance
Chemical name : Aluminum Oxide (synonyms: Alumina)
Chemical formula : Al_2O_3
CAS RN : 1344-28-1
Concentration : More than 99% (as Al_2O_3)

4.FIRST-AID MEASURES

Inhalation : Gargle with water and move to a place with fresh air to rest.
If you feel unwell, seek medical advice.

Skin contact : Wash with soap and water.
If there is skin irritation, seek medical advice.

Eye contact : Rinse cautiously with water for several minutes. Remove the contact lenses, it will be washed until irritation is eliminated.
If eye irritation persists, seek medical advice.

Ingestion : After rinsing the mouth, drink water.
If you feel unwell, seek medical advice.

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.

6.ACCIDENTAL LEAKAGE MEASURES

Protective equipment and emergency procedures :
Wear suitable protective equipment when handling leaks. (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 an empty container that can be sealed.
Rinse the uncollectible portion with plenty of water.

Prevention of secondary disaster : Please covered with a sheet for shatterproof.

7.HANDLING AND STORAGE PRECAUTION

Handling

Technical measures	: Wear suitable protective equipment (section 8).
Safe handling advice	: Please adequate ventilation by the overall ventilation and local exhaust. Handle it gently and avoid inhaling dust.
Hygiene measure	: After handling, wash face and hands with water. Do not eat, drink or smoke when handling.

Storage

Conditions for safe storage	: Seal the container and store it in a well-ventilated place with a key.
Safe packaging materials	: Use a sealable container.

8.EXPOSURE CONTROLS / PERSONAL PROTECTION

Limit value

Japan Industry Hygienic Society [2] : Applicable the first-class dust as Alumina
Inhalation dust = 0.5 mg/m^3 ,Total dust = 2 mg/m^3

ACGIH [3] : As insoluble Aluminium salts TWA(Time Weighted Average) = 1 mg/m^3

Equipment 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 rubber gloves, etc.
Eye protection	: Wear protective goggles.
Skin and body protection	: Wear dustproof work clothes if necessary.

9.PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: White spherical particles
Odor	: None
Melting point	: 2000～2100 ℃
Boiling point	: About 3000 ℃
Flammability	: Incombustibility
Lower explosion limit and upper explosion limit/flammability limit	: No data
Flash point	: No data
Spontaneous ignition point	: No data
Decomposition temperature	: No data
pH	: No data
Kinematic viscosity	: Not applicable
Solubility	: Insoluble in water Insoluble in acid / alkali at normal pressure
n-Octanol/water partition coefficient (log value)	: No data
Vapor pressure	: Not applicable
Specific gravity	: 3.9
Relative gas density	: Not applicable
Particle characteristics	: Spherical fine particles

10. STABILITY AND REACTIVITY

Reactivity	: None
Chemical stability	: Chemically stable
Hazardous reactions possible	: None
Conditions to avoid	: Dust generation and diffusion.
Mixed dangerous substances	: None
Hazardous decomposition products	: None

11. HARMFULNESS INFORMATION

Acute Toxicity	: LCLo = 357 mg/m^3 (mouse 60 days, inhalation) [4)] LD_{50} > 5,000 mg/kg (oral-rat) [1)]
Skin corrosive / irritation	: No data
Serious eye damage / eye irritation	: No data
Respiratory or skin sensitization	: No data
Germ cell mutagenicity	: No data
Carcinogenicity	: No data
Reproductive toxicity	: No data
Specific target organ toxicity (single exposure)	: There is a description of upper respiratory tract irritation (ICSC-2000) [1)]
Specific target organ toxicity (repeated exposure)	: There is a description that adenomyosis was observed in the lung (EHC-1997) [1)]
Harmfulness of accidental ingestion	: No data

12. ENVIRONMENTAL IMPACT INFORMATION

Ecotoxicity	: No data
Residability / degradability	: None
Bioaccumulation	: No data
Mobility in soil	: None
Harmfulness to the Ozone layer	: No data

13. DISPOSAL CONSIDERATIONS

Residual waste : Avoid release to the environment.
When disposing, please follow all regulations in your country.

Contaminated containers and packaging
: After washing with water, should be disposed of in accordance with all regulations of your country.

14.TRANSPORT INFORMATION

Safety measures during transportation :

Be careful not to break the packaging bag, get wet with water, or collapse the load.

See Section 7. HANDLING AND STORAGE.

Follow all regulations in your country.

UN number : None

IATA DGR／ICAO TI : Not restricted

IMDG code : Not restricted

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 (2019)

1) GHS Classification , Announced officially by National Institute of Technology and Evaluation (Japan).
2) Japan Industry Hygienic Society, Industrial Medicine. (2019)
3) ACGIH - Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices. (2018)
4) Our technical data.

IMPORTANT NOTE:

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