

SAFETY DATA SHEET

1. IDENTIFICATION

Product name: Aluminum oxide

CAS No. : 1344-28-1

Brand: Macklin

Company: Shanghai Macklin Biochemical Co.,Ltd.

Address: Shanghai Pudong Zhangjiang High-tech Park; 1st Building, 68 Huatuo Road; SHANGHAI CHINA

Zip code: 201206

Telephone: +86 21-50706066

Fax: +86 21-50706099

E-mail: sales@macklin.cn; tech@macklin.cn

Revision date: 2019/12/12

2. HAZARDS IDENTIFICATION

GHS classification

PHYSICAL HAZARDS

no data available

HEALTH HAZARDS

no data available

ENVIRONMENTAL HAZARDS

no data available

GHS label elements, including precautionary statements

Pictograms or hazard symbols

Signal word

no data available

Hazard statements

no data available

Precautionary statements

Prevention

no data available

Response

no data available

Storage

no data available

Disposal

no data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components:Aluminum oxide

CAS No.:1344-28-1

Chemical Formula:Al₂O₃

4. FIRST AID MEASURES

4.1

Description of necessary first-aid measures

If inhaled
Fresh air, rest.
Following skin contact
Rinse and then wash skin with water and soap.
Following eye contact
First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.
Following ingestion
Rinse mouth.
4.2
Most important symptoms/effects, acute and delayed
no data available
4.3
Indication of immediate medical attention and special treatment needed, if necessary
no data available

5. FIRE-FIGHTING MEASURES

5.1
Suitable extinguishing media
Use dry chemical, carbon dioxide or alcohol-resistant foam.
5.2
Specific hazards arising from the chemical
Not combustible.
5.3
Special protective actions for fire-fighters
In case of fire in the surroundings, use appropriate extinguishing media.

6. ACCIDENTAL RELEASE MEASURES

6.1
Personal precautions, protective equipment and emergency procedures
Personal protection: particulate filter respirator adapted to the airborne concentration of the substance. Sweep spilled substance into covered containers. If appropriate, moisten first to prevent dusting. Wash away remainder with plenty of water.
6.2
Environmental precautions
Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.
6.3
Methods and materials for containment and cleaning up
Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

Conditions for safe storage, including any incompatibilities

Store the container at room temperature. Store separately from food containers or incompatible materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure limit values
TLV: 1 mg/m³, as TWA; A4 (not classifiable as a human carcinogen). MAK: carcinogen category: 2
Biological limit values
no data available
Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice.

Set up emergency exits and the risk-elimination area.

Personal protective equipment

Eye/face protection

Wear safety goggles or eye protection in combination with breathing protection.

Skin protection

Protective gloves.

Respiratory protection

Use local exhaust or breathing protection.

Thermal hazards

no data available

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state

no data available

Odour

no data available

Melting point/freezing point

no data available

Boiling point or initial boiling point and boiling range

no data available

Flammability

no data available

Lower and upper explosion limit/flammability limit

no data available

Flash point

no data available

Auto-ignition temperature

no data available

Decomposition temperature

no data available

pH

no data available

Kinematic viscosity

no data available

Solubility

no data available

Partition coefficient n-octanol/water

no data available

Vapour pressure

no data available

Density and/or relative density

no data available

Relative vapour density

no data available

Particle characteristics

no data available

10. STABILITY AND REACTIVITY

10.1

Reactivity

no data available

10.2

Chemical stability

no data available

10.3

Possibility of hazardous reactions

No data.No data.

10.4

Conditions to avoid

no data available

10.5

Incompatible materials

no data available

10.6

Hazardous decomposition products

no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral: no data available

Inhalation: LC50 - rat (male) - > 0.888 mg/L air (analytical).

Dermal: no data available

Skin corrosion/irritation

no data available

Serious eye damage/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

STOT-single exposure

Inhalation of high concentrations of dust may cause irritation of the eyes and respiratory tract.

STOT-repeated exposure

The substance may have effects on the central nervous system.

Aspiration hazard

Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly.

12. ECOLOGICAL INFORMATION

12.1

Toxicity

Toxicity to fish: LC50 - Pimephales promelas - 1.16 mg/L - 96 h.

Toxicity to daphnia and other aquatic invertebrates: LC50 - Ceriodaphnia dubia - 0.72 mg/L - 48 h.

Toxicity to algae: NOEC - Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) - \geq 0.044 mg/L - 72 h.

Toxicity to microorganisms: no data available

12.2

Persistence and degradability

no data available

12.3

Bioaccumulative potential

no data available

12.4

Mobility in soil

no data available

12.5

Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

14. TRANSPORT INFORMATION

14.1

UN Number

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

14.2

UN Proper Shipping Name

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

14.3

Transport hazard class(es)

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

14.4

Packing group, if applicable

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

14.5

Environmental hazards

ADR/RID: No

IMDG: No

IATA: No

14.6

Special precautions for user

no data available

14.7

Transport in bulk according to IMO instruments

no data available

15. REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product in question

EC number

215-691-6

European Inventory of Existing Commercial Chemical Substances (EINECS)

Listed.

EC Inventory

Listed.

United States Toxic Substances Control Act (TSCA) Inventory

Listed.

China Catalog of Hazardous chemicals 2015

Not Listed.

New Zealand Inventory of Chemicals (NZIoC)

Listed.

Philippines Inventory of Chemicals and Chemical Substances (PICCS)

Listed.

Vietnam National Chemical Inventory

Listed.

Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)

Listed.

Korea Existing Chemicals List (KECL)

Listed.

16. OTHER INFORMATION

This SDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.