Version: v1

Revision Date: 2023-07-

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SAFETY DATA SHEET

Print Date: 2023-07-24

SECTION 1:Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Tetramethylammonium chloride

Product Number : T110540
Brand : aladdin
CAS-No. : 75-57-0

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : 仅供科研用途,不作为药物、家庭备用药或其它用途。

1.3 Details of the supplier of the safety data sheet

Company : Shanghai Aladdin Biochemical Tech Co.,Ltd

Address : 36 Xinjinqiao Road, Shanghai

Telephone : 400-620-6333 Fax : no data available

1.4 Emergency telephone number

Emergency Phone : 0532-83889090

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute oral toxicity category 2

Acute dermal toxicity Category 3

Skin corrosion / irritation category 2

Specific target organ toxicity primary exposure category 1

Hazard to the aquatic environment - long term hazard category 2 $\,$

2.2 GHS Label elements, including precautionary statements

Pictogram
Signal word
Danger

Hazard statement(s)

H300 Fatal if swallowed

H311 Toxic in contact with skin

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H315 Causes skin irritation

H370 Causes damage to organs

H411 Toxic to aquatic life with long lasting effects

Precautionary statement(s)

P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P264 Wash hands [and ...] thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/...

P302+P352+P312 IF ON SKIN: Wash with plenty of water.Call a POISON CENTER/ doctor if you feel

unwell.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms : TMA
Formula : C4H12CIN
Molecular weight : 109.6
CAS No. : 75-57-0
EC-NO. : 200-880-8

Component Classification Concentration

Tetramethylammonium chloride

no data available >98.0%(T)

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

If swallowed

After swallowing: Drink immediately (up to 2 cups). If you feel unwell, consult a doctor.

4.2 Most important symptoms and effects, both acute and delayed

no data available

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4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Dry powder, foam, water mist, carbon dioxide

Unsuitable extinguishing media

no data available

5.2 Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures consult an expert.

6.2 Environmental precautions

If safety is ensured, measures can be taken to prevent further leakage or spillage. Don't let the product go down the drain.

6.3 Methods and materials for containment and cleaning up

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.Keep away from open flames, he surfaces and sources of ignition.Take precautionary measures against static discharge.Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

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7.2 Conditions for safe storage, including any incompatibilities

Argon filling; dry

7.3 Specific end use(s)

no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

If it is safe, prevent further leakage or spillage and do not allow the product to enter the sewer system.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance no data available b) Odour no data available c) Odour Threshold no data available d) pH no data available e) Melting point/freezing point no data available f) Initial boiling point and boiling range

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g) Flash point no data available h) Evaporation rate no data available i) Flammability (solid, gas) no data available

j) Upper/lower flammability or explosive

no data available limits k) Vapour pressure no data available I) Vapour density no data available m) Relative density no data available n) Water solubility no data available o) Partition coefficient: n-octanol/water no data available p) Auto-ignition temperature no data available q) Decomposition temperature no data available no data available r) Viscosity s) Explosive properties N no data available t) Oxidizing properties N no data available

9.2 Other safety information

no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions.

10.2 Chemical stability

no data available

10.3 Possibility of hazardous reactions

hygroscopic

10.4 Conditions to avoid

Strong oxidizing agents, Strong bases

10.5 Incompatible materials

no data available

10.6 Hazardous decomposition products

LD50 Oral - Rat - 50 mg/kg Remarks: Behavioral:Somnolence (general depressed activity).Behavioral:Convulsions or effec on seizure threshold. Skin and Appendages: Other: Hair. LD50 Dermal - Rat - 537 mg/kg

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

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Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Carcinogenicity

no data available

Reproductive toxicity

Oral - Causes damage to organs.- Central nervous system

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 462 mg/l - 96 h (OECD Test Guideline 203) Toxicity to daphnia and other aquatic invertebrates NOEC - Daphnia magna (Water flea) - 0.03 mg/l - 11 d

Additional Information

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

12.1 Toxicity

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 Results of PBT and vPvB assessment

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no data available

12.6 Other adverse effects

no data available

SECTION 13:

13.1 **Disposal considerations**

Recycle to process, if possible. Consult your local regional authorities and an expert of disposal. You may be able to dissolve or mix material with a combustible solvent and little by little burn in a chemical incinerator equipped with an afterburner and scrubber system. If a large amount of the substance is burned at a time, an explosion may occur. Observe all federal, state and local regulations when disposing of the substance.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

DOT (US)

UN number: 2811 Packing group: II Class: 6.1

Proper shipping name: Toxic solids,

Reportable Quantity(RQ): no data available Poison Inhalation Hazard: no data

organic, n.o.s.(Tetramethylammonium

chloride)

Environmental Hazards: no data available

IMDG

UN number: 2811 Packing group: II EMS-No: no data available

Proper shipping name: Toxic solids, organic, n.o.s.(Tetramethylammonium chloride)

IATA

Class: 6.1 UN number: 2811 Packing group: II

Proper shipping name: Toxic solids, organic, n.o.s.(Tetramethylammonium chloride)

SECTION 15: Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

SECTION 16: Other information

Further information

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