SAFETY DATA SHEET

Version: v1
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SECTION 1:Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name	: titrant-component for volumetric Karl Fischer titration
Product Number	: K123004
Brand	: aladdin
CAS-No.	: no data available

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)

Flammable liquid (category 2), H225

Acute toxicity, oral (category 3), H301

Acute toxicity, inhalation (category 3), H331

Acute toxicity, dermal (category 3), H311

Specific target organ system toxicity (single exposure) (category 1), eyes, central nervous system, H370

2.2 GHS Label elements, including precautionary statements

Pictogram

Signal word Danger

Hazard statement(s)

H225	Highly Flammable liquid and vapor

H370	Causes damage to organs
H301+H311+H331	Toxic if swallowed, in contact with skin or if inhaled
Precautionary statement(s)	
P210	Keep away from heat, hot surface, sparks, open flames and other ignition sources. - No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof [electrical/ventilating/lighting/.../] equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash hands [and …] thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P311	Call a POISON CENTER or doctor/...
P330	Rinse mouth.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/...
P303+P361+P353	IF ON SKIN (or hair): Take off Immediately all contaminated clothing. Rinse SKIN with water [or shower].
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P311	IF exposed or concerned: Call a POISON CENTER/doctor/...
P370+P378	In case of fire: Use ... to extinguish.
P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container to an approved waste disposal plant.

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

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms	: Volumetric two-component Karl Fischer reagent; two-component Karl Fischer test solution
Formula	: no data available
Molecular weight	: no data available
CAS No.	: no data available
EC-NO.	: no data available

Component	Classification	Concentration

Component	Classification	Concentration
titrant-component for volumetric Karl Fischer titration		
	Flammable liquid category 2; acute toxicity category No. 3; Specific target organ system toxicity (One contact) Category 1; H225, H301, H331, H311, H370	Water equivalent 1 mg H2O/mL,A

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

After inhalation: Move the injured to a place with fresh air. See a doctor immediately. If breathing stops: Immediately perform mechanical respiration, and use oxygen if necessary.

In case of skin contact

In case of skin contact: immediately remove/take off all contaminated clothing. Wash skin/shower with water. Call a doctor immediately.

In case of eye contact

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

If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

Water foam carbon dioxide (CO2) dry powder

Unsuitable extinguishing media

no data available

5.2 Special hazards arising from the substance or mixture

Carbon oxides are combustible. Beware of tempering. Vapor is heavier than air, so it can spread along the ground. In case of fire, hazardous gas or vapor may be generated. Forms explosive mixture with air at moderate temperature

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

Persons who do not wear personal breathing apparatus should not enter the hazardous area. Keep a safe distance and wear appropriate protective clothing to avoid skin contact. Remove the container from the hazardous area and cool it with water. Prevent firefighting water from polluting the surface and groundwater system.

6.2 Environmental precautions

Do not let the product enter the drain. Risk of explosion.

6.3 Methods and materials for containment and cleaning up

Cover the sewer. Collect, contain, and extract the leakage. Observe the material restrictions that may apply (see sections 7 and 10). Remove dry. Discard. Clean up the affected area. Avoid dust generation.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Operate under a fume hood. Do not inhale the substance/mixture. Avoid generating vapor or smoke. Keep away from open flames, hot surfaces and sources of ignition. Take measures to prevent electrostatic discharge. Change contaminated clothing immediately. Use skin protection lotion. Wash hands and face after using this substance. For preventive measures, see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep the container tightly closed and store in a dry and ventilated place. Keep away from heat and fire sources. Store this substance in a lockable place or a place where only qualified or approved persons can enter it.

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

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 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

Impervious 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 fullface respirator with multi-purpose combination (US) or type
ABEK (EN 14387) 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 safety requires, prevent further leakage or spillage. Do not let the product enter the sewer.

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	no data available
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 limits	no data available
k) Vapour pressure	no data available
l) 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
r) Viscosity	no data available
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

no data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

There is a risk of explosion when interacting with it: oxidizer perchloric acid perchlorate oxyhalide chromium oxide (VI) oxyhalide nitrogen oxide non-metal oxide chromium sulfate chlorate hydride diethyl zinc halogen powdered magnesium Hydrogen peroxide, nitric acid, sulfuric acid, permanganate, sodium hypochlorite reacts exothermically with: Halogenated acid anhydride reducing agent acid bromine, chloroform, magnesium, tetrachloromethane, and may cause fire or the risk of generating flammable gas or vapor: Raney, the oxide of fluorine and phosphorus Nickel produces dangerous gases or if it comes in contact with the items on the right, it can produce harmful smoke: alkaline earth metals, alkali metals

10.4 Conditions to avoid

Warm up

10.5 Incompatible materials

Various plastics, magnesium, zinc alloy

10.6 Hazardous decomposition products

no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute toxicity estimate Oral-100.1 mg/kg

(Expert Opinion)

Remarks: Classification according to EU CLP Regulation 1272/2008, Annex 6 (Table 3.1/3.2)

Symptoms: nausea, vomiting

Acute toxicity estimate Inhalation-4 h-3.1 mg/l

(Expert Opinion)

Remarks: Classification according to EU CLP Regulation 1272/2008, Annex 6 (Table 3.1/3.2)

Symptoms: Symptoms of irritation in the respiratory tract.

Acute toxicity estimate Dermal-300.1 mg/kg

(Expert Opinion)

Remarks: Classification according to EU CLP Regulation 1272/2008, Annex 6 (Table 3.1/3.2)

Skin corrosion/irritation

Skin-Rabbit Results: No skin irritation. Remarks: (ECHA) Drying effect that causes rough or cracked skin.

Serious eye damage/eye irritation

Eyes-Rabbit Result: No eye irritation Remarks: (ECHA)

Respiratory or skin sensitisation

Sensitivity test:-Guinea pig Result: negative (OECD Test Guideline 406)

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

As far as we know, this chemical, physical and toxic properties have not been fully studied. System effects: Acidosis, decreased blood pressure, excitement, convulsions, drunkenness, dizziness, drowsiness, headache, visual impairment, blindness, anesthesia, coma. Symptoms will be delayed. Destruction: Liver, kidney, and heart cause irreversible damage to the optic nerve. Other dangers cannot be ruled out. This substance must be handled with

special care

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish flow-through test LC50-bluegill sunfish-15,400.0 mg/l-96 h

(US-EPA)

Toxicity to water flea and other aquatic invertebrates

Semi-static test EC50-Daphnia magna (Water flea)-18,260 mg/l-96 h

(OECD Test Guideline 202)

Toxicity to algae static test ErC50-Pseudokirchneriella subcapitata (green algae)-approximately 22,000.0 mg/l

-96 h

(OECD Test Guideline 201)

Toxicity to bacteria static test IC50-activated sludge-> 1,000 mg/l-3 h

(OECD Test Guideline 209)

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

Will not be adsorbed by the soil.

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

no data available

SECTION 13:

13.1 Disposal considerations

Product

Hand over the remaining and non-recyclable solution to a licensed company for disposal.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

DOT (US)

UN number: 1230	Packing group: II	Class: 3
Proper shipping name: Methanol	Reportable Quantity(RQ): no data available	Poison Inhalation Hazard: no data available
Environmental Hazards: No		

IMDG

UN number: 1230	Packing group: II	EMS-No: no data available
Proper shipping name: Methanol		

IATA

UN number: 1230	Packing group: II	Class: 3
Proper shipping name: Methanol		

SECTION 15: Regulatory information

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

SECTION 16: Other information

Further information

 The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Aladdin Co. Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.

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