

14078 Meridian Parkway, Riverside, CA. 92518

# 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 : Tribromomethane

Product Number : T121971
Brand : aladdin
CAS-No. : 75-25-2

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

Identified uses : Laboratory chemicals, Manufacture of substances.

1.3 Company

Company : ALADDIN SCIENTIFIC CORPORATION

Address : 14078 Meridian Parkway,

Riverside, CA. 92518

Telephone : +1 (833) 552-7181 Fax : no data available

### 1.4 Emergency telephone number

CHEMTREC®, Inside the USA : 800-424-9300 CHEMTREC®, Outside the USA : 001-703-527-3887

#### **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 3), H226

Acute toxicity, oral (category 4), H302

Acute toxicity, inhalation (category 3), H331

Skin corrosion/irritation (category 2), H315

Serious eye damage/eye irritation (category 2A), H319

Acute (short-term) aquatic hazard (category 2), H401

Long-term aquatic hazard (category 2), H411

### 2.2 GHS Label elements, including precautionary statements



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Pictogram		! <b>〉 基</b>
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Signal word Danger

Hazard statement(s)

H226 Flammable liquid and vapor

H302 Harmful if swallowed H315 Causes skin irritation

H319 Causes serious eye irritation

H331 Toxic if inhaled

H411 Toxic to aquatic life with long lasting effects

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.
P261 Avoid breathing 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.

P273 Avoid release to the environment.

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

P311 Call a POISON CENTER or doctor/...

P391 Collect spillage.

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.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses if present and easy to do - continue rinsing.

P332+P313 IF SKIN irritation occurs: Get medical advice/attention.
P337+P313 IF eye irritation persists: Get medical advice/attention.

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.

P301+P312+P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.

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



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### **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Synonyms : Bromoform
Formula : CHBr3
Molecular weight : 252.73
CAS No. : 75-25-2
EC-NO. : 200-854-6

Component	Classification	Concentration
Tribromomethane		
	Flammable liquid category 3; acute toxicity category Category 4; Acute toxicity Category 3; Skin rot Erosion/irritation category 2; serious eye damage/ Eye irritation Category 2A; Acute (short Period) Aquatic hazard category 2; long-term water Biohazard category 2; H226, H302, H331, H315, H319, H401, H411 Flammable liquid Category 2; serious eye damage Injury/eye irritation Category 2A; H225, H319	for spectroscopy,>99.0% (GC)

#### **SECTION 4: First aid measures**

### 4.1 Description of first aid measures

General advice

Emergency personnel need to protect themselves. Show this safety data sheet to the doctor on site.

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: Wash off with plenty of water. Call an ophthalmologist immediately. Remove contact lenses.

If swallowed

After swallowing: Let the injured drink water (maximum 2 glasses) to avoid vomiting (risk of perforation!). Call a doctor immediately. Do not try to neutralize.

## 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



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#### **SECTION 5: Firefighting measures**

### 5.1 Extinguishing media

Suitable extinguishing media

Water, foam, carbon dioxide (CO2) dry powder, adopt appropriate fire extinguishing measures according to the current situation and surrounding environment.

Unsuitable extinguishing media

For this substance/mixture, there are no restrictions on extinguishing agents.

## 5.2 Special hazards arising from the substance or mixture

Carbon oxides and hydrogen bromide are non-flammable. Flammable. Vapor is heavier than air, so it can spread over the ground. Forms explosive mixtures with air at high temperatures. Hazardous gases or vapors may be generated in the event of a fire. Surrounding fire sources may cause the release of hazardous vapors.

# 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 Do not inhale vapors or aerosols. Avoid material contact. Ensure adequate ventilation. Keep away from heat and fire sources. Evacuate the dangerous area, follow emergency procedures, and seek expert advice. For personal protection, see section 8.

#### 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 drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). 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

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.



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# 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. Protect from light

# 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

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as

NIOSH (US) or EN166(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 fullface respirator with multipurpose 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

Do not let product enter drains.



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## **SECTION 9: Physical and chemical properties**

### 9.1 Information on basic physical and chemical properties

a) Appearance form: Liquid color: Colorless

b) Odour no data available c) Odour Threshold no data available d) pH no data available

e) Melting point/freezing point 8-9°C f) Initial boiling point and boiling range 148-150°C

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 2.88998

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 an explosion hazard when interacting with: Acetone, potassium hydroxide, exothermic reaction: Alkaline earth metal, alkali, strong alkali, it will decompose violently after contact: alkali metal metal powder

#### 10.4 Conditions to avoid

heating



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#### 10.5 Incompatible materials

Strong oxidants

# 10.6 Hazardous decomposition products

no data available

### **SECTION 11: Toxicological information**

# 11.1 Information on toxicological effects

Acute toxicity

Acute toxicity estimate Oral-933 mg/kg

(Calculation method)

LD50 Oral-Rat-933 mg/kg

Remarks: Lung, chest, or respiratory system: difficulty breathing

(RTECS)

Acute toxicity estimate Inhalation-4 h-3.1 mg/l-Vapor (calculation method)

Acute toxicity estimate Inhalation-Expert opinion-4 h-3.1 mg/l-Vapor

Skin corrosion/irritation

Skin-In vitro test results: Corrosive effects occur when exposed to contact for 4 hours or less. (OECD Test Guideline 431)

Serious eye damage/eye irritation

Causes serious eye irritation. Classification according to EU CLP Regulation 1272/2008, Annex 6 (Table 3.1/3.2)

Respiratory or skin sensitisation

Chemical skin sensitization-direct peptide response test (DPRA)-skin protein Result: non-skin sensitizer (OECD Test Guideline 442C)

Germ cell mutagenicity

According to the available data, the classification conditions cannot be met. Test type: Ames test Test system:

Salmonella typhimurium Metabolism activation: With or without metabolic activation Method: OECD Test Guideline

471 Result: Positive

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



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no data available

Additional Information

Registration of Toxic Effects of Chemical Substances: PB5600000

As far as we know, the chemical, physical and toxic properties have not been fully studied.

### **SECTION 12: Ecological information**

### 12.1 Toxicity

Toxicity to fish static test LC50-Lepomis macrochirus (bluegill sunfish)-29 mg/l-96 h

Remarks: (ECHA)

No ridge to water flea and other aquatic species

Toxicity of Vertebral Animals

Static test EC50-Daphnia magna (Water flea)-46 mg/l-48 h

Remarks: (ECHA)

Toxicity to algae static test ErC50-Pseudokirchneriella subcapitata-13 mg/l-72 h

(OECD Test Guideline 201)

Static test NOEC-Pseudokirchneriella subcapitata-2.8 mg/l-72 h

(OECD Test Guideline 201)

Toxicity to bacteria static test EC50-activated sludge-> 1,000 mg/l-3 h

(OECD Test Guideline 209)

Static test NOEC-activated sludge-<10 mg/l-3 h

(OECD Test Guideline 209)

#### 12.2 Persistence and degradability

Aerobic-Exposure time 28 d Result: 6%-Not easily biodegradable quickly. (OECD Test Guideline 301D)

### 12.3 Bioaccumulative potential

no data available

#### 12.4 Mobility in soil

no data available

# 12.5 Results of PBT and vPvB assessment

no data available



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#### 12.6 Other adverse effects

no data available

#### **SECTION 13:**

### 13.1 Disposal considerations

**Product** 

ecycle 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: 2515 Packing group: III Class: 6.1

Proper shipping name: Bromoform Reportable Quantity(RQ): no data Poison Inhalation Hazard: no data

available available

Environmental Hazards: no data available

**IMDG** 

UN number: 2515 Packing group: III EMS-No: no data available

Proper shipping name: Bromoform

IATA

UN number: 2515 Packing group: III Class: 6.1

Proper shipping name: Bromoform

# **SECTION 15: Regulatory information**

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

#### **SECTION 16: Other information**

Regulatory Affairs

Prepared By ALADDIN SCIENTIFIC CORPORATION

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