## 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 : Tetramethylthiuram disulfide

Product Number : T111113
Brand : aladdin
CAS-No. : 137-26-8

## 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)

#### 2.2 GHS Label elements, including precautionary statements

**Pictogram** 

Warning



Signal word

**Hazard statement(s)** 

H315 Causes skin irritation

H317 May cause an allergic skin reaction

H319 Causes serious eye irritation

H332 Harmful if inhaled

H400 Very toxic to aquatic life

H302+H332 Harmful if swallowed or if inhaled

**Precautionary statement(s)** 

P273 Avoid release to the environment.

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

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

lenses if present and easy to do - continue rinsing.

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

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

#### 3.1 Substances

Synonyms : Bis(dimethylthiocarbamoyl) disulfide Bis(dimethylthiocarbamyl) disulfide

Thiram TMTD

Formula : C6H12N2S4

Molecular weight : 240.43

CAS No. : 137-26-8

EC-NO. : 205-286-2

Component	Classification	Concentration
Tetramethylthiuram disulfide		
	no data available	97%

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

## 4.1 Description of first aid measures

#### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

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

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

## If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## 4.2 Most important symptoms and effects, both acute and delayed

no data available

## 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

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

## Unsuitable extinguishing media

no data available

## 5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products formed under fire conditions.- Carbon oxides, nitrogen oxides (NOx), Sulphur oxides Hazardous decomposition products formed under fire conditions.- Carbon oxides, nitrogen oxides (NOx), Sulphur oxides

## 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### **5.4** Further information

no data available

## **SECTION 6: Accidental release measures**

## 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

## 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so.Do not let product enter drains. Discharge into the environment must be avoided.

#### 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

no data available

#### **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

#### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Keep in a dry place.

#### 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**

no data available

#### 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 gloves 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.

#### **Body Protection**

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

#### Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## Control of environmental exposure

no data available

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

## 9.1 Information on basic physical and chemical properties

a) Appearance form: 粉 color: 灰褐色 b) Odour no data available c) Odour Threshold no data available d) pH no data available e) Melting point/freezing point > 400 °C (> 752 °F)

f) Initial boiling point and boiling range 129°C

g) Flash point 150.00 °C (302.00 °F) - open cup

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 1.425 g/cm3 at 20 °C (68 °F)

n) Water solubility
o) Partition coefficient: n-octanol/water
p) Auto-ignition temperature
q) Decomposition temperature
r) Viscosity
s) Explosive 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

Strong oxidizing agents

#### 10.4 Conditions to avoid

no data available

#### 10.5 Incompatible materials

Hazardous decomposition products formed under fire conditions.- Carbon oxides, nitrogen oxides (NOx), Sulphur oxides Hazardous decomposition products formed under fire conditions.- Carbon oxides, nitrogen oxides (NOx), Sulphur oxides Other decomposition products - no data available

#### 10.6 Hazardous decomposition products

no data available

## **SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

**Acute toxicity** 

Skin - rabbit - Mild skin irritation

Skin corrosion/irritation

Eyes - rabbit - Moderate eye irritation

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

Genotoxicity in vitro - Hamster - Lungs Mutation in mammalian somatic cells. Genotoxicity in vitro - Human - lymphocyte Micronucleus test Genotoxicity in vitro - Human - lymphocyte DNA damage Genotoxicity in vitro - Human - lymphocyte DNA inhibition Genotoxicity in vitro - rat - Other cell types DNA inhibition Genotoxicity in vivo - mouse - Oral sperm Genotoxicity in vivo - mouse - Oral Dominant lethal test Genotoxicity in vivo - rat - Oral Morphological transformation. Genotoxicity in vivo - mouse - Intraperitoneal Micronucleus test Genotoxicity in vivo - mouse - Oral DNA damage Genotoxicity in vivo - mouse - Oral Cytogenetic analysis

#### Germ cell mutagenicity

Carcinogenicity - mouse - Skin Tumorigenic:Neoplastic by RTECS criteria.Skin and Appendages: Other: Tumors.Carcinogenicity - rat - Oral Tumorigenic:Equivocal tumorigenic agent by RTECS criteria.Skin and Appendages: Other: Tumors.Carcinogenicity - mouse - Subcutaneous Tumorigenic:Equivocal tumorigenic agent by RTECS criteria.Lungs, Thorax, or Respiration:Tumors.Blood:Tumors.IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Thiram) 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

Reproductive toxicity - rat - Oral Paternal Effects: Testes, epididymis, sperm duct.Reproductive toxicity - rat - Oral Effects on Fertility: Pre-implantation mortality (e.g., reduction in number of implants per female; total number of implants per corpora lutea).Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).Effects on Fertility: Litter size (e.g.; # fetuses per litter; measured before birth).

#### Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

Toxic if inhaled. Causes respiratory tract irritation.

**Aspiration hazard** 

no data available

**Additional Information** 

no data available

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

#### 12.1 Toxicity

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 Results of PBT and vPvB assessment

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life.

#### 12.6 Other adverse effects

no data available

#### **SECTION 13:**

#### 13.1 Disposal considerations

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

## **Contaminated packaging**

Dispose of as unused product.

## **SECTION 14: Transport information**

DOT (US)

UN number: 3077 Packing group: III Class: 9

available available available

Environmental Hazards: no data available

**IMDG** 

UN number: 3077 Packing group: III EMS-No: no data available

Proper shipping name: no data available

**IATA** 

UN number: 3077 Packing group: III Class: 9

Proper shipping name: no data available

#### **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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