

## Material Safety Data Sheet

Version 4.0

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## 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Dimethyl sulfide

Product Number : 274380

Brand : Sigma-Aldrich

Company : Sigma-Aldrich Canada, Ltd  
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## 2. HAZARDS IDENTIFICATION

## Emergency Overview

## WHMIS Classification

B2 Flammable liquid  
D2B

Flammable liquid  
Moderate eye irritant

## GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

H225 Highly flammable liquid and vapour.  
H303 May be harmful if swallowed.  
H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H335 May cause respiratory irritation.

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P280 Wear protective gloves/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.

## HMIS Classification

Health hazard: 2  
Flammability: 3  
Physical hazards: 0

## Potential Health Effects

Inhalation May be harmful if inhaled. Causes respiratory tract irritation.  
Skin May be harmful if absorbed through skin. Causes skin irritation.  
Eyes Causes eye irritation.  
Ingestion May be harmful if swallowed.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Methyl sulfide

## DMS

Formula : C<sub>2</sub>H<sub>6</sub>S  
Molecular Weight : 62.13 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
<b>Dimethyl sulfide</b>			
75-18-3	200-846-2	-	-

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### 4. FIRST AID MEASURES

#### General advice

Move out of dangerous area. Consult a physician. Show this 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

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

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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### 5. FIRE-FIGHTING MEASURES

#### Suitable extinguishing media

For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

#### Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### Further information

Use water spray to cool unopened containers.

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### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

#### Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

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

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

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### 7. HANDLING AND STORAGE

#### Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

#### Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in cool place.

Handle and store under inert gas. Refrigerate before opening. Handle and open container with care. hygroscopic

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis
Dimethyl sulfide	75-18-3	TWA	10 ppm	2006-11-29	Canada. British Columbia OEL
		TWAE V	10 ppm	2005-12-17	Canada. Ontario OELs
		TWA	10 ppm 25 mg/m3	2009-04-30	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
Remarks	Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required				

### Personal protective equipment

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type AXBEK (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).

#### Hand protection

Handle with gloves.

#### Eye protection

Face shield and safety glasses

#### Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

#### Hygiene measures

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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form                      liquid

### Safety data

pH                              no data available

Melting point                -98 °C (-144 °F) - lit.

Boiling point                38 °C (100 °F) - lit.

Flash point                  -36 °C (-33 °F) - closed cup

Ignition temperature        no data available

Lower explosion limit       2.2 %(V)

Upper explosion limit       19.7 %(V)

Vapour pressure              402.743 hPa (302.082 mmHg) at 20 °C (68 °F)  
1,356.608 hPa (1,017.540 mmHg) at 55 °C (131 °F)

Density                        0.846 g/cm3 at 25 °C (77 °F)

Water solubility              insoluble

Relative vapour density     2.1

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## 10. STABILITY AND REACTIVITY

### Chemical stability

Stable Stable under recommended storage conditions.

### Possibility of hazardous reactions

Vapours may form explosive mixture with air.

### Conditions to avoid

Heat, flames and sparks.

### Materials to avoid

Strong oxidizing agents

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known.

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## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

LD50 Oral - rat - 3,300 mg/kg

Remarks: Behavioral:General anesthetic. Behavioral:Change in motor activity (specific assay).

LC50 Inhalation - rat - 40250 ppm

Remarks: Lungs, Thorax, or Respiration:Other changes.

LD50 Dermal - rabbit - > 5,000 mg/kg

### Skin corrosion/irritation

Skin - rabbit - Mild skin irritation - 24.00 h

Remarks: Irritating to skin.

### Serious eye damage/eye irritation

Eyes - rabbit - Severe eye irritation - 24 h

Remarks: Severe eye irritation

### Respiratory or skin sensitization

### Germ cell mutagenicity

no data available

### Carcinogenicity

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.

### Reproductive toxicity

no data available

### Specific target organ toxicity - single exposure (GHS)

Inhalation - May cause respiratory irritation.

### Specific target organ toxicity - repeated exposure (GHS)

no data available

### Aspiration hazard

no data available

### Potential health effects

<b>Inhalation</b>	May be harmful if inhaled. Causes respiratory tract irritation.
<b>Ingestion</b>	May be harmful if swallowed.
<b>Skin</b>	May be harmful if absorbed through skin. Causes skin irritation.
<b>Eyes</b>	Causes eye irritation.

### Signs and Symptoms of Exposure

Nausea, Headache, Vomiting

### Additional Information

RTECS: PV5075000

## 12. ECOLOGICAL INFORMATION

### Toxicity

### Persistence and degradability

### Bioaccumulative potential

no data available

### Mobility in soil

no data available

### PBT and vPvB assessment

no data available

### Other adverse effects

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## 13. DISPOSAL CONSIDERATIONS

### Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

### Contaminated packaging

Dispose of as unused product.

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## 14. TRANSPORT INFORMATION

### DOT (US)

UN-Number: 1164 Class: 3 Packing group: II  
Proper shipping name: Dimethyl sulfide  
Marine pollutant: No  
Poison Inhalation Hazard: No

### IMDG

UN-Number: 1164 Class: 3 Packing group: II EMS-No: F-E, S-D  
Proper shipping name: DIMETHYL SULPHIDE  
Marine pollutant: No

### IATA

UN-Number: 1164 Class: 3 Packing group: II  
Proper shipping name: Dimethyl sulphide

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## 15. REGULATORY INFORMATION

### DSL Status

All components of this product are on the Canadian DSL list.

### WHMIS Classification

B2 Flammable liquid  
D2B

Flammable liquid  
Moderate eye irritant

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## 16. OTHER INFORMATION

### Further information

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