# **Material Safety Data Sheet**

Version 5.1 Revision Date 02/12/2013 Print Date 09/04/2013

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : 11-Mercapto-1-undecanol

Product Number : 447528 Brand : Aldrich

Supplier : Sigma-Aldrich

3050 Spruce Street SAINT LOUIS MO 63103

USA

Telephone : +1 800-325-5832 Fax : +1 800-325-5052 Emergency Phone # (For : (314) 776-6555

both supplier and

manufacturer)

Preparation Information : Sigma-Aldrich Corporation

Product Safety - Americas Region

1-800-521-8956

#### 2. HAZARDS IDENTIFICATION

### **Emergency Overview**

### **OSHA Hazards**

Irritant

#### Other hazards which do not result in classification

Stench.

#### **GHS Classification**

Skin irritation (Category 2) Eye irritation (Category 2A)

Specific target organ toxicity - single exposure (Category 3)

## GHS Label elements, including precautionary statements

Pictogram

**(!)** 

Signal word Warning

Hazard statement(s)

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Precautionary statement(s)

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ eye protection/ face protection.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position 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.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

P321 Specific treatment (see supplemental first aid instructions on this label).

P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant.

**HMIS Classification** 

Health hazard: 2 Flammability: 1 Physical hazards: 0

**NFPA** Rating

Health hazard: 2 Fire: 1 Reactivity Hazard: 0

**Potential Health Effects** 

InhalationSkinMay be harmful if inhaled. Causes respiratory tract irritation.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 : 11-Hydroxy-1-undecanethiol

11-Hydroxy-1-undecanthiol 11-Hydroxyundecane-1-thiol

Formula :  $C_{11}H_{24}OS$ Molecular Weight : 204.37 g/mol

Component		Concentration
11-Mercapto-1-undeca	anol	
CAS-No.	73768-94-2	-

#### 4. 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.

### 5. FIREFIGHTING MEASURES

### Suitable extinguishing media

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

### Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

## **Hazardous combustion products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Sulphur oxides

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#### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

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

### **Environmental precautions**

Do not let product enter drains.

### 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.

### 7. HANDLING AND STORAGE

### 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. Normal measures for preventive fire protection.

### Conditions for safe storage

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

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

### Personal protective equipment

### **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).

#### Hand 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.

#### Eye 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 and 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.

## 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 solid

Colour no data available

Safety data

pH no data available

Melting Point/range: 33 - 37 °C (91 - 99 °F) - lit.

point/freezing point

Boiling point no data available

Flash point > 113 °C (> 235 °F) - closed cup

Ignition temperature no data available

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Auto-ignition no data available

temperature

no data available Lower explosion limit Upper explosion limit no data available Vapour pressure no data available Density no data available Water solubility no data available

Partition coefficient:

n-octanol/water

no data available

Relative vapour

no data available

density

Odour Stench.

Odour Threshold no data available Evapouration rate no data available

### 10. STABILITY AND REACTIVITY

#### **Chemical stability**

Stable under recommended storage conditions.

### Possibility of hazardous reactions

no data available

#### Conditions to avoid

no data available

#### Materials to avoid

Strong oxidizing agents

#### Hazardous decomposition products

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

#### 11. TOXICOLOGICAL INFORMATION

### **Acute toxicity**

### Oral LD50

no data available

### Inhalation LC50

### **Dermal LD50**

no data available

#### Other information on acute toxicity

no data available

#### Skin corrosion/irritation

no data available

### Serious eye damage/eye irritation

no data available

#### Respiratory or skin sensitisation

no data available

## 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.

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.

### Reproductive toxicity

no data available

### Teratogenicity

no data available

### Specific target organ toxicity - single exposure (Globally Harmonized System)

Inhalation - May cause respiratory irritation.

### Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

### **Aspiration hazard**

no data available

#### Potential health effects

**Inhalation** May be harmful if inhaled. Causes respiratory tract irritation.

**Ingestion** May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. Causes skin irritation.

**Eyes** Causes eye irritation.

#### Signs and Symptoms of Exposure

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

#### Synergistic effects

no data available

### **Additional Information**

RTECS: Not available

### 12. ECOLOGICAL INFORMATION

#### **Toxicity**

no data available

## Persistence and degradability

no data available

## Bioaccumulative potential

no data available

### Mobility in soil

no data available

#### PBT and vPvB assessment

no data available

#### Other adverse effects

no data available

### 13. DISPOSAL CONSIDERATIONS

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#### **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.

#### 14. TRANSPORT INFORMATION

#### DOT (US)

UN number: 3335 Class: 9

Proper shipping name: Aviation regulated solid, n.o.s. (11-Mercapto-1-undecanol)

Marine pollutant: No

Poison Inhalation Hazard: No

#### **IMDG**

Not dangerous goods

IATA

UN number: 3335 Class: 9 Packing group: III

Proper shipping name: Aviation regulated solid, n.o.s. (11-Mercapto-1-undecanol)

#### 15. REGULATORY INFORMATION

#### **OSHA Hazards**

Irritant

#### **SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### **SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### SARA 311/312 Hazards

Acute Health Hazard

### **Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

#### Pennsylvania Right To Know Components

CAS-No.

Revision Date

11-Mercapto-1-undecanol

73768-94-2

New Jersey Right To Know Components

CAS-No. 73768-94-2 Revision Date

11-Mercapto-1-undecanol

# California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

#### **16. OTHER INFORMATION**

### **Further information**

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