## Material Safety Data Sheet

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Date Updated: 14/MAR/2004
Version 1.1
According to 91/155/EEC

Classified as Hazardous according to the criteria of EU Annex 1 and NOHSC.

# 1 - Product and Company Information

Product Name Product Number	ALLYL ETHER, 98% 259470
Company	Sigma-Aldrich Pty, Ltd Unit 2, 14 Anella Avenue Castle Hill NSW 1765 Australia
Technical Phone # Fax	+61 2 9841 0555 +61 2 9841 0500
Emergency Phone #	+61 2 9841 0566

## 2 - Composition/Information on Ingredients

Product Name	CAS #	EC no	Annex I Index Number
ALLYL ETHER, 99%	557-40-4	209-174-4	

Formula C6H100 Molecular Weight 98.15 AMU

Synonyms Allylether \* Diallylether \* Ether, propenyl \*

Propenyl ether \* 3,3'-Oxybis(1-propene)

## 3 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT Highly flammable. Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin.

### 4 - First Aid Measures

## AFTER INHALATION

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

### AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

# 5 - Fire Fighting Measures

### EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

### SPECIAL RISKS

Specific Hazard(s): Extremely flammable. Emits toxic fumes under fire conditions. Vapor may travel considerable distance to

source of ignition and flash back. Explosion Hazards: Vapor may travel considerable distance to source of ignition and flash back. Container explosion may occur under fire conditions.

## SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

#### 6 - Accidental Release Measures

PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL Evacuate area.

## PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

## METHODS FOR CLEANING UP

Cover with dry lime or soda ash, pick up, keep in a closed container, and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

### 7 - Handling and Storage

#### HANDLING

Directions for Safe Handling: Do not breathe vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

#### STORAGE

Conditions of Storage: Keep tightly closed. Keep away from heat, sparks, and open flame. Store in a cool dry place.
Unsuitable: Forms explosive peroxides on prolonged storage

SPECIAL REQUIREMENTS: Air and light sensitive.

## 8 - Exposure Controls / Personal Protection

## ENGINEERING CONTROLS

Safety shower and eye bath. Use only in a chemical fume hood.

#### GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Wash thoroughly after handling.

## PERSONAL PROTECTIVE EQUIPMENT

Special Protective Measures: Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

## 9 - Physical and Chemical Properties

Appearance	N/A	
Property	Value	At Temperature or Pressure
pH BP/BP Range MP/MP Range	N/A 94 - 95 °C N/A	760 mmHg
Flash Point Flammability	-7 °C N/A	Method: closed cup

```
Autoignition Temp
                        N/A
Oxidizing Properties
                       N/A
Explosive Properties
                       N/A
Explosion Limits
                       N/A
Vapor Pressure
                      N/A
SG/Density
                       0.803 \, \text{g/cm}3
Partition Coefficient N/A
Viscosity
                       N/A
Vapor Density
                       N/A
Saturated Vapor Conc. N/A
Evaporation Rate
                       N/A
Bulk Density
                       N/A
Decomposition Temp.
                       N/A
Solvent Content
                       N/A
Water Content
                       N/A
Surface Tension
                       N/A
Conductivity
                       N/A
Miscellaneous Data
                        N/A
Solubility
                       N/A
```

## 10 - Stability and Reactivity

#### STABILITY

Conditions of Instability: Light sensitive.

Conditions to Avoid: Air sensitive.

Materials to Avoid: Strong oxidizing agents, Strong acids.

### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

### 11 - Toxicological Information

RTECS NUMBER: KN7525000

#### ACUTE TOXICITY

LD50

Oral

Rat

320 mg/kg

T<sub>1</sub>D50

Skin

Rabbit

600 mg/kg

### SIGNS AND SYMPTOMS OF EXPOSURE

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

#### ROUTE OF EXPOSURE

Skin Contact: Causes skin irritation.

Multiple Routes: Harmful if swallowed, inhaled, or absorbed through skin. Vapor or mist is irritating to the eyes, mucous membranes, and upper respiratory tract.

## 12 - Ecological Information

#### No data available.

## 13 - Disposal Considerations

#### SUBSTANCE DISPOSAL

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.

## 14 - Transport Information

```
RID/ADR
   UN#: 2360
   Class: 3
   PG: II
   Proper Shipping Name: Diallyl ether
IMDG
  UN#: 2360
   Class: 3
   PG: TT
   Subrisk: 6.1
   Proper Shipping Name: Diallyl ether
   Marine Pollutant: No
   Severe Marine Pollutant: No
IATA
   UN#: 2360
   Class: 3
   PG: TT
   Subrisk: 6.1
   Proper Shipping Name: Diallyl ether
   Inhalation Packing Group I: No
```

### 15 - Regulatory Information

```
CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES
  INDICATION OF DANGER: F Xn
    Highly Flammable. Harmful.
  R-PHRASES: 11 20/21/22 36/37/38
    Highly flammable. Harmful by inhalation, in contact with skin
    and if swallowed. Irritating to eyes, respiratory system and
     skin.
  S-PHRASES: 16 26 36/37/39 45
    Keep away from sources of ignition - no smoking. In case of
    contact with eyes, rinse immediately with plenty of water and
    seek medical advice. Wear suitable protective clothing, gloves,
    and eye/face protection. In case of accident or if you feel
    unwell, seek medical advice immediately (show the label where
    possible).
```

### SWITZERLAND

SWISS POISON CLASS: 3

### 16 - Other Information

# WARRANTY

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. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice

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