



## MATERIAL SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION:

<b>PRODUCT CODE</b>	A0062
<b>PRODUCT NAME</b>	EUCALYPTOL
<b>SUPPLIER</b>	Shanghai M & U International Trade Co., Ltd. Rm 1717, No 598 North NuJiang Road 200333 Shanghai, China +86-21-32515501 32515502 sales@mu-intel.com

**FOR EMERGENCIES CALL CHEMTREC: 800-424-9300 (24-HOURS)**

### 2. HAZARD IDENTIFICATION:

#### Emergency Overview

#### OSHA Hazards -

Combustible Liquid, Target Organ Effect, Irritant

Target Organs

Kidney

#### GHS Classification

Flammable liquids (Category 3)

Acute toxicity, Oral (Category 5)

#### GHS Label elements, including precautionary statements

#### Pictogram

#### Signal word

Warning

#### Hazard statement(s)

H226

Flammable liquid and vapor.

H303

May be harmful if swallowed.

#### Precautionary statement(s)

none

#### HMIS Classification

Health hazard

2

Flammability

2

Physical hazards

2

#### NFPA Rating

Health hazard

2

Fire

2

Reactivity Hazard

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 AND INFORMATION ON INGREDIENTS:

SYNONYMS	1,3,3-Trimethyl-2-oxabicyclo[2.2.2]octane. 1,8-Epoxy-p-menthane 1,8-Cineole
Formula	C10 H18 O
Molecular Weight	154.25 g/mol
CAS-No	EC-No
470-82-6	207-431-5

### 4. FIRST-AID GUIDE:

#### **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**

Flush eyes with water as a precaution.

#### **If swallowed**

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

### 5. FIRE-FIGHTING GUIDE:

#### **Conditions of flammability**

Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/parks/open flame/hot surface. No smoking.

#### **Suitable extinguishing media**

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

#### **Special protective equipment for fire-fighters**

Wear self contained breathing apparatus for firefighting if necessary.

#### **Hazardous combustion products**

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

#### **Further information**

Use water spray to cool unopened containers.

### 6. ACCIDENTAL RELEASE GUIDE:

#### **Personal precautions**

Avoid breathing vapors, mist or gas. Remove all sources of ignition. Beware of vapors accumulating to form explosive concentrations. Vapors 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 an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 12). Keep in suitable, closed containers for disposal.

**7. HANDLING AND STORAGE:**

**Precautions for safe handling**

Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup 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.

**8. EXPOSURE AND PERSONAL PROTECTION:**

Contains no substances with occupational exposure limit values.

**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 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).

**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**

Face shield and safety glasses with side-shields conforming to EN166 Use equipment for eye protections tested and approved under appropriate government standards such as NOISH (US) or EN 166(EU).

**Skin and body protection**

Impervious clothing. 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.

**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
Color	colorless to pale yellow
Safety data	
Melting point (°C)	1
Boiling point (°C)	176
Flash point (°F)	Closed cup 115
Density @25 °C	0.922
Water solubility	insoluble
Odor	aromatic, camphoraceous

**10. STABILITY AND REACTIVITY:****Chemical stability**

Stable under recommended storage conditions.

**Conditions to avoid**

Heat, flames and sparks.

**Materials to avoid**

Strong oxidizing agents, Strong acids, Acid chlorides, Acid anhydrides.

**Hazardous decomposition products**

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

**11. TOXICOLOGICAL INFORMATION:****Acute toxicity****Oral LD50**

LD50 Oral-rat-2,480 mg/kg

Remarks: Behavioral: Somnolence (general depressed activity). Behavioral: Coma.

Skin corrosion/irritation

Skin-rabbit- No skin irritation

Germ cell mutagenicity

Genotoxicity in vitro-Hamster-ovary

Sister chromatid exchange

**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

Reproductive toxicity-rat- Subcutaneous

**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**

Ingestion may provoke the following symptoms: Epigastric pain, Nausea, Vomiting, Dizziness, muscle weakness, tachycardia, Cyanosis, delirium, Convulsions, renal damage. Edema.

**12. ECOLOGICAL INFORMATION:**

Toxicity to fish LC50-Pimephales promelas(fathead minnow)-102 mg/l- 96 h

**13. DISPOSAL RECOMMENDATIONS:**

**Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but use extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

**14. TRANSPORTATION INFORMATION:**

**DOT (US)**

UN number: 1993 Class:3 Packing group: III

Proper shipping name: Flammable liquids,n.o.s. (Cineole)

**IMDG**

UN number:1993 Class: 3 Packing group: III

Proper shipping name:FLAMMABLE LIQUID, N.O.S. (Cineole)

**IATA**

UN number: 1993 Class: 3 Packing group: III

Proper shipping name: Flammable liquid, n.o.s. (Cineole)

**15. REGULATORY INFORMATION:**

OSHA Hazards

Combustible Liquid, Target Organ Effect, 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

Fire Hazard, Acute Health Hazard, Chronic Health Hazard.

Massachusetts Right To Know Components

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

Pennsylvania Right To Know Components

Cineole	CAS-No.	Revision Date
	470-82-6	

New Jersey Right To Know Components

Cineole	CAS-No.	Revision Date
	470-82-6	

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.

**OTHER INFORMATION:**

The information in this MSDS was obtained from current and reliable sources. However, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions for use, handling, storage and disposal of this product are beyond M&U's control, it is the responsibility of the user both to determine safe conditions for use of this product and to assume liability for loss, damage, or expense arising out of the products improper use. No warranty expressed or implied regarding the product described herein will be created by or inferred from any statement or omission in the MSDS. Various federal, state, or provincial agencies may have specific regulations concerning the transportation, handling, storage, use, or disposal of this product which may not be reflected in the MSDS. The user should review these regulations to ensure full compliance.

Prepared by Shanghai M&U International