



## MATERIAL SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION:

**PRODUCT CODE** A0080  
**PRODUCT NAME** GARLIC OIL  
**SUPPLIER** 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, Harmful by ingestion

#### GHS Classification

Flammable liquids (Category 3)

Acute toxicity, Oral (Category 4)

#### GHS Label elements, including precautionary statements

Pictogram

Signal word Warning

Hazard statement(s)

H226 Flammable liquid and vapour

H302 Harmful if swallowed

Precautionary statement(s) none

#### HMIS Classification

<b>Health hazard</b>	1
<b>Flammability</b>	2
<b>Physical hazards</b>	1
<b>NFPA Rating</b>	
<b>Health hazard</b>	1
<b>Fire</b>	2
<b>Reactivity Hazard</b>	0

#### Potential Health Effects

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

### 3. COMPOSITION AND INFORMATION ON INGREDIENTS:

Formula	C6 H10 O S2
Molecular weight	162.26
Cas. No.	EC. No.
8000-78-0	232-371-1

### 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:

#### **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 firefighters**

Wear self contained breathing apparatus for firefighting if necessary

#### **Hazardous combustion products**

Hazardous decomposition products formed under fire conditions.

Nature of decomposition products not known

#### **Further information**

Use water spray to cool unopened containers

### 6. ACCIDENTAL RELEASE GUIDE:

**Personal precautions**

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. 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 an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13)

**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 buildup of electrostatic charge

**Conditions for safe storage**

Store in cool place, 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:**

This chemical 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 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)

**Skin and body protection**

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing, and 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	Pale yellow to reddish orange

### Safety data

pH	no data available
Melting point (°C)	-85 deg °C
Boiling point (°C)	139 deg °C
Flash point (°F)	118 °F
Vapour pressure (mm Hg @20 °C)	no data available
Density @25 °C	1.083
Water solubility	Slight

## 10. STABILITY AND REACTIVITY:

### Chemical stability

Stable under recommended storage conditions

### Possibility of hazardous reactions

No data available

### 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

Other decomposition products

No data available

## 11. TOXICOLOGICAL INFORMATION:

### Acute toxicity

<b>Oral LD50</b>	rat - 1,360 mg/kg
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<b>Inhalation LC50</b>	no data available
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<b>Dermal LD50</b>	no data available
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### 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 sensitization**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

IARC: No components 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 components 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 components 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 components 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)**

No data available

**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. May cause respiratory tract irritation

Ingestion                        Harmful if swallowed

Skin                                Harmful if absorbed through skin May cause skin irritation

Eyes                                May cause eye irritation

**Signs and Symptoms of Exposure**

No data available

**Additional Information**

RTECS: LX3154800

**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 RECOMMENDATIONS:****Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company

**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.

Marine pollutant: No

Poison Inhalation Hazard: No

**IMDG**

UN number: 1993 Class: 3 Packing group: III EMS-No: F-E, S-E

Proper shipping name: FLAMMABLE LIQUID, N.O.S.

Marine pollutant: No

**IATA**

UN number: 1993 Class: 3 Packing group: III

Proper shipping name: Flammable liquid, n.o.s

**15. REGULATORY INFORMATION:****OSHA Hazards**

Combustible Liquid, Harmful by ingestion

**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

**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

Garlic oil 8000-78-0

**New Jersey Right to Know Components**

CAS-No. Revision Date

Garlic oil 8000-78-0

**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:**

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.