

**01. IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY UNDERTAKING****1.1 Product Identifier**

1.1 Product Identifier	Garlic Oil				
Biological Definition	Garlic oil derived from the seeds of garlic				
INCI Name	Garlic Oil				
Synonyms Trade Names	-				
CAS Number	800-78-0	EC Number	232-371-1	EINECS No.	232-371-1

**1.2 Relative identified uses of the substance or mixture and uses advised against**

No additional data available.

**1.3 Details of the supplier of the safety data sheet**

Calmer Solutions Limited - Hadresham, Woolborough Lane, Outwood, Surrey, England RH1 5QR - Reg No 4992013

**1.4 Emergency Telephone Number**

In case of a medical emergency following exposure to a chemical, call NHS Direct in England or Wales 0845 46 47 or NHS 24 in Scotland 08454 24 24 (UK Only)

**02. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture**

The full text for all hazard statements are displayed in Section 16.

Classification (EC 1272 / 2008)

Flammable Liquid

GHS02

GHS07

None

None

None



Signal Word

Warning

Contains

**Hazard Statements**

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

## Precautionary Statements

P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301 IF SWALLOWED:  
P312 Call a POISON CENTER or doctor/physician if you feel unwell.  
P333 If skin irritation or rash occurs:  
P313 Get medical advice/attention.  
P305 IF IN EYES:  
P351 Rinse cautiously with water for several minutes.  
P338 Remove contact lenses, if present and easy to do. Continue rinsing.  
P333 If skin irritation or rash occurs:  
P313 Get medical advice/attention.  
P337 If eye irritation persists:

## Supplementary Precautionary Statements

None Identified

## 2.3 Other Hazards

PBT or PvB according to Annex XIII	No additional data available.
Adverse physio-chemical properties	No additional data available.
Adverse effects on human health	No additional data available.

## 03. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

**50 - 100 % Garlic Oil**

CAS No: 8000-78-0 EC No: 232-371-1

Not Classed as a Hazardous Substance

**0 - 70 % Diallyl disulphide**

CAS No: 2179-57-9 EC No: 218-548-6

Classification (EC 1272/2008): Acute Tox. 3 - H301, Skin Irrit. 2 - H315, Eye Irrit. 2 - H319, Skin Sens. 1B - H317

**0 - 20 % Diallyl trisulphide**

CAS No: 2050-87-5 EC No: 218-107-8

Classification (EC 1272/2008): Acute Tox. 4 - H302

## 04. FIRST AID MEASURES

### 4.1 Description of first aid measures

41 Inhalation:	Move affected person to fresh air at once. Get medical attention.
41 Ingestion:	DO NOT INDUCE VOMITING! Get medical attention immediately.
41 Eye:	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately.
41 Skin:	Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if

any discomfort continues.

## 4.2 Most important symptoms and effects, both acute and delayed

No additional data available.

## 4.3 Indication of any immediate medical attention and special treatment needed

No additional data available.

# 05. FIRE FIGHTING MEASURES

## 5.1 Extinguishing Media

Carbon dioxide, Chemical Powder or Foam. Do not use a direct stream of water.

## 5.2 Special hazards arising from the product

In case of fire Carbon Monoxide and other unidentified organic compounds may be released.

## 5.3 Advice for firefighters

In case of insufficient ventilation use suitable respiratory equipment. Wear chemical protective clothing.

# 06. ACCIDENTAL RELEASE MEASURES

## 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Provide adequate ventilation. Avoid contact with skin and eyes. Avoid inhalation of vapours. Wear protective clothing and gloves. For emergency responders: Wear an appropriate NIOSH / MSHA approved respirator if mist or vapour is generated.

## 6.2 Environmental Precautions

Do not discharge into drains, water courses or onto the ground.

## 6.3 Methods and material for containment and clearing up

Absorb with liquid binding material (e.g sand, diatomaceous earth, acid or universal binding agents). Collect in closed and suitable containers for disposal.

## 6.4 Reference to other sections

For personal protection, see Section 8. For waste disposal, see Section 13. [Click here to enter text.](#)

# 07. HANDLING AND STORAGE

## 7.1 Precautions for safe handling

Avoid spilling, skin and eye contact. Ensure adequate ventilation of the working area. Adopt best manual handling considerations when handling, carrying and dispensing. Keep away from heat, sparks and open flame.

## 7.2 Conditions for safe storage, including and incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container.

## 7.3 Specific end use(s)

No additional data available.

# 08. EXPOSURE CONTROLS / PERSONAL PROTECTION

## 8.1 Control Parameters

No additional data available.

## 8.2 Exposure controls

## Protective Equipment

Goggles



Gloves



Overalls



None

None

Process Conditions:

Provide eyewash station.

Engineering Measures:

Provide adequate ventilation. Observe Occupational Exposure Limits and m

Respiratory Equipment:

No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists.

Hand Protection:

Use suitable protective gloves if risk of skin contact.

Eye Protection:

If risk of splashing, wear safety goggles or face shield.

Other Protection:

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene Measures:

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap & water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. When using, do not eat, drink or smoke.

Personal Protection:

Use personal protection according to Directive 89/686/EEC.

Skin Protection

Wear apron or protective clothing in case of splashes.

Environmental

Exposure Controls:

Avoid discharging into drainage water. Only eliminate by authorised companies.

## 09. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance:	Liquid
Colour:	Golden Yellow - Reddish Orange
Flash Point:	47°C
Odour:	Garlic like, Pungent
Relative Density:	1.065 g/m <sup>3</sup> (20 C)
Refractive:	1.559 - 1.579 (20 C)
Melting Point:	No Additional Information
Boiling:	120°C
Vapour:	No additional data available.
Solubility:	Insoluble in water.
Auto Ignition:	No additional data available.

### 9.2 Other Information

No additional data available.

## 10. STABILITY AND REACTIVITY

## 10.1 Reactivity

No additional data available.

## 10.2 Chemical Stability

Stable under the recommended handling and storage conditions.

## 10.3 Possible hazardous reactions

No additional data available.

## 10.4 Conditions to avoid

No additional data available.

## 10.5 Incompatible materials

Oxidising agents.

## 10.6 Hazardous Decomposition Products

No additional data available.

# 11. TOXOLOGICAL INFORMATION

## 11.1 Information on toxological effects

Acute Toxicity:	No additional data available.
Respiratory or skin sensitisation:	No additional data available.
Skin corrosion/irritation:	No additional data available.
Serious Eye damage/irritation:	No additional data available.
Germ Cell Mutagenicity:	No additional data available.
Carcinogenicity:	No additional data available.
Reproductive toxicity:	No additional data available.
STOT Single exposure:	No additional data available.
STOT Repeated exposure:	No additional data available.
Photo-toxicity:	No additional data available.
Aspiration hazard:	Do not allow product to enter streams or waterways.
Other Information:	No additional data available.

# 12. ECOLOGICAL INFORMATION

## 12.1 Toxicity

No additional data available.

## 12.2 Persistence Degradability

No additional data available.

### 12.3 Bioaccumulation Potential

No additional data available.

### 12.4 Mobility in soil

No additional data available.

### 12.5 Results of PBT and vPvB Assessment

No additional data available.

### 12.6 Other adverse effects

Do not allow product to enter streams, sewers or other waterways.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

Waste from Residues / Unused Products Disposal should be in accordance with applicable regional, national and local laws and regulations. Contaminated packaging Improper disposal or reuse of this container may be dangerous and illegal.

## 14. TRANSPORT INFORMATION

### 14.1 UN number

Road:	1993
Sea:	1993
Air:	1993

### 14.2 UN Prpoer shipping name

Flammable Liquid,

### 14.3 Transport hazard class(es)

ADR/RID/ADN Class: 3: (F1) Flammable liquids IMDG Class: 3: Flammable liquids ICAO Class/Division: 3: Flammable liquids Transport Labels

Cl. 3_140_s	ADR	FL	ADR	FL
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### 14.4 Packing group

ADR/RID/ADN Packing group	IIIMDG Packing group	IIICAO Packing
group III		

### 14.5 Environmental Hazards

None

ADR	FL	ADR	FL	ADR	FL
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### 14.6 Special precautions for users

Warning: flammable liquids EMS Number : F-E, S- DDanger Code (Kemler): 36 Tunnel restriction code: D/ELimited Quantities (LQ) Excepted Quantities (EQ) ADR & IMDG

5L Code: E1Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 mlUN "Model Regulation" UN1993, FLAMMABLE LIQUID, N.O.S. (not viscous) (alpha-PINENE Thujone), ENVIRONMENTALLY HAZARDOUS, 3, III

## 14.7 Transport in bulk according to Annex II of MARLPOL73/78 and the IBC Code

Not applicable.

## 15. REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance

Statutory InstrumentsThe Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).Guidance NotesWorkplace Exposure Limits EH40. CHIP for everyone HSG(108).EU LegislationRegulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

### 15.2 Chemical safety assessment

No additional information available.

## 16. OTHER INFORMATION

Hazard or precaution	H301 Toxic if swallowed H302 Harmful if swallowed H315 Causes skin irritation H317 May cause allergic skin reaction H319 Causes serious eye irritation
Other Information::	None.
Revision Date:	4/1/2022
Reason:	New SDS
Revision Number:	2

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