



GARLIC ESSENTIAL OIL MATERIAL SAFETY DATA SHEET

Section 1: Identification of the substance/mixture and of the company/undertaking
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1.1. Product identifier

Product name: GARLIC OIL

CAS number: 8008-99-9

EINECS number: 232-371-1

Index number: 2503

Product code: AIL100084

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of substance / mixture: E.U Commodity Code: 3301 29 41 FDA: 184.1317.
INCI Name: Allium savitum.

1.3. Details of the supplier of the safety data sheet

Company name: G. Baldwin & Co.

173 Walworth Road,

LONDON, ENGLAND. SE17 1RW.

Telephone: +44 (0) 207 703 5550 Fax: +44 (0)207 252 6264

E-mail: info@baldwins.co.uk

Web: www.baldwins.co.uk

1.4. Emergency telephone number

Emergency tel: +44 (0) 207 703 5550
(office hours only)

Section 2: Hazards identification
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2.1. Classification of the substance or mixture

Classification under CHIP: -: R10; Xn: R22; Xi: R38; T: R39; Xn: R40; Xi: R41; Sens.: R42/43

Classification under CLP: Acute Tox. 4: H302; Carc. 2: H351; Eye Dam. 1: H318; Flam. Liq. 3: H226; Skin Irrit. 2: H315; Skin Sens. 1: H317

Most important adverse effects:

Flammable. Harmful if swallowed. Irritating to skin. Danger of very serious irreversible effects. Limited evidence of a carcinogenic effect. Risk of serious damage to eyes. May cause sensitisation by inhalation and skin contact.

2.2. Label elements

Label elements under CLP:

Hazard statements:

H226: Flammable liquid and vapour.

H302: Harmful if swallowed.

H315: Causes skin irritation.

Signal words:

Hazard pictograms:

Precautionary statements:

Label elements under CHIP:

Hazard symbols:

Risk phrases:

Safety phrases:

H317: May cause an allergic skin reaction.

H318: Causes serious eye damage.

H351: Suspected of causing cancer.

Danger

GHS02: Flame

GHS05: Corrosion

GHS07: Exclamation mark

GHS08: Health hazard

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P321: Specific treatment (see instructions on this label).

P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor.

P303+361+353: IF ON SKIN (or hair): Remove immediately all contaminated clothing.

Rinse skin with water.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+313: IF exposed or concerned: Get medical advice/attention.

P310: Immediately call a POISON CENTER or doctor.

Toxic.

R10: Flammable.

R22: Harmful if swallowed.

R38: Irritating to skin.

R39: Danger of very serious irreversible effects.

R40: Limited evidence of a carcinogenic effect.

R41: Risk of serious damage to eyes.

R42/43: May cause sensitisation by inhalation and skin contact.

S23: Do not breathe.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39: Wear suitable protective clothing, gloves and eye / face protection.

S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S63: In case of accident by inhalation, remove casualty to fresh air and keep at rest.

2.3. Other hazards

Other hazards: Risk of explosion if heated under confinement.

PBT: This substance is not identified as a PBT substance.

Section 3: Composition/information on ingredients
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3.2. Mixtures

Hazardous ingredients:

ALLYL DISULPHIDE

EINECS CAS CHIP Classification CLP Classification Percent

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Xn: R22; Xi: R38; T: R39; Xn:

R40; Xi: R41; Sens.: R42;

Sens.: R43

10-

30%

ALLYL TRISULFIDE

-

Xn: R22 10-

30%

Contains: Essential oil of *Allium sativum*, Liliaceae. (distilled)

100% natural from named source.

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact:

Remove all contaminated clothes and footwear immediately unless stuck to skin.

Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Consult a doctor.

Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Consult a doctor.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

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

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

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

Immediate / special treatment: Eye bathing equipment should be available on the premises.

<h3>Section 5: Fire-fighting measures</h3>

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.

Do not handle in a confined space. Avoid the formation or spread of mists in the air.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well ventilated area. Keep container tightly closed. The floor of the storage room must be impermeable to prevent the escape of liquids.

Suitable packaging: 6 months from date of despatch if kept under optimum conditions.

7.3. Specific end use(s)

Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area. The floor of the storage room must be impermeable to prevent the escape of liquids.

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Impermeable gloves.

Eye protection: Safety glasses. Ensure eye bath is to hand.

Skin protection: Impermeable protective clothing.

Section 9: Physical and chemical properties
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9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Straw

Odour: Strong intense characteristic odour.

Evaporation rate: Negligible

Oxidising: Non-oxidising (by EC criteria)

Solubility in water: Insoluble

Viscosity: Non-viscous

Flash point°C: 50 Part.coeff. n-octanol/water: 1.5500 to 1.5850

Vapour pressure: -0.4 to +0.4 Relative density: 1.060 to 1.097

pH: 0

9.2. Other information

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

Section II: Toxicological information
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II.1. Information on toxicological effects

Relevant effects for mixture:

Effect Route Basis

Acute toxicity (harmful) ING Hazardous: calculated

Irritation DRM Hazardous: calculated

Sensitisation INH DRM Hazardous: calculated

Symptoms / routes of exposure

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

Section 12: Ecological information

12.1. Toxicity

12.2. Persistence and degradability

Persistence and degradability: Not biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: Bioaccumulation potential.

12.4. Mobility in soil

Mobility: Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This substance is not identified as a PBT substance.

12.6. Other adverse effects

Other adverse effects: Toxic to aquatic organisms. Toxic to soil organisms.

Section 13: Disposal considerations
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13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information
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14.1. UN number

UN number: UN1197

14.2. UN proper shipping name

Shipping name: Extracts, Aromatic, Liquid

14.3. Transport hazard class(es)

Transport class: 3

14.4. Packing group

14.5. Environmental hazards

Environmentally hazardous: No Marine pollutant: No

14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: D/E

Transport category: I

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Section 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Recommended for professional use only as an ingredient in food flavours.

Phrases used in s.2 and 3: H226: Flammable liquid and vapour.

H302: Harmful if swallowed.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H318: Causes serious eye damage.

H351: Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

R10: Flammable.

R22: Harmful if swallowed.

R38: Irritating to skin.

R39: Danger of very serious irreversible effects.

R40: Limited evidence of a carcinogenic effect.

R41: Risk of serious damage to eyes.

R42/43: May cause sensitisation by inhalation and skin contact.

R42: May cause sensitisation by inhalation.

R43: May cause sensitisation by skin contact.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.



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