

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 12.03.2012

Revision: 12.03.2012

1 Identification of the substance/mixture and of the company/undertaking

. Product identifier

- . Trade name: **MANDARIN GREEN OIL** . Article number: 2074
- . Relevant identified uses of the substance or mixture and uses advised against
- . Application of the substance / the preparation Multi uses

. Details of the supplier of the safety data sheet

. Manufacturer/Supplier:

Butterbur and Sage Ltd, Aroma House,
3 - 5 Cremyll Road, Reading, Berkshire, RG1 8NQ, U.K
TEL : + 44 (0) 1189 505100
FAX : + 44 (0) 1189 576300
e-mail : info@butterburandsage.com

- . Further information obtainable from: Department Essential Oils
- . Emergency telephone number: + 44 (0) 1189 505100

2 Hazards identification

- . Classification of the substance or mixture
- . Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS08 health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

. Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Xn; Harmful

R65: Harmful: may cause lung damage if swallowed.



Xi; Irritant

R38: Irritating to skin.



Xi; Sensitising

R43: May cause sensitisation by skin contact.



N; Dangerous for the environment

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R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R10: Flammable.

Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS02 GHS07 GHS08 GHS09

Signal word Danger

Hazard-determining components of labelling:

(R)-p-mentha-1,8-diene
gamma terpinène
pin-2(3)-ene
béta pinène

Hazard statements

H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H304 May be fatal if swallowed and enters airways.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

* 3 Composition/information on ingredients

Chemical characterization: Substances

CAS No. Description

8008-31-9 mandarin oil

Identification number(s)

EC number: 284-521-0

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. Chemical characterization: Mixtures

. Description: NCS (UVCB) Constituents Information

. hazardous components:

CAS: 5989-27-5 EINECS: 227-813-5	(R)-p-mentha-1,8-diene Xi R38; Xi R43; N R50/53 R10 Flam. Liq. 3, H226; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Irrit. 2, H315; Skin Sens. 1, H317	50-100%
CAS: 99-85-4 EINECS: 202-794-6	gamma terpinène Xn R65 R10 Flam. Liq. 3, H226; Asp. Tox. 1, H304	10-25%
CAS: 80-56-8 EINECS: 201-291-9	pin-2(3)-ene Xn R65; Xi R38; Xi R43 R10 Flam. Liq. 3, H226; Asp. Tox. 1, H304; Skin Irrit. 2, H315; Skin Sens. 1, H317	≤ 2.5%
CAS: 123-35-3 EINECS: 204-622-5	7-methyl-3-methyleneocta-1,6-diene Xn R65; Xi R38 R10 Flam. Liq. 3, H226; Asp. Tox. 1, H304; Skin Irrit. 2, H315; Eye Irrit. 2, H319	≤ 2.5%
CAS: 127-91-3 EINECS: 204-872-5	béta pinène Xn R65; Xi R38; Xi R43 R10 Flam. Liq. 3, H226; Asp. Tox. 1, H304; Skin Irrit. 2, H315; Skin Sens. 1, H317	≤ 2.5%
CAS: 586-62-9 EINECS: 209-578-0	terpinolène Xn R65; N R51/53 R10 Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411	≤ 2.5%
CAS: 99-87-6 EINECS: 202-796-7	p-cymene Xn R65; N R51/53 R10 Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411	≤ 2.5%
CAS: 99-86-5 EINECS: 202-795-1	p-mentha-1,3-diene Xn R22-65; N R51/53 R10 Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Acute Tox. 4, H302	≤ 2.5%

. Additional information: For the wording of the listed risk phrases refer to section 16.

4 First aid measures

. Description of first aid measures

. After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

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- Supply fresh air.
- . **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
Immediately rinse with water.
If skin irritation continues, consult a doctor.
- . **After eye contact:** Rinse opened eye for several minutes under running water.
- . **After swallowing:** Inform doctor. Do not give milk or fatty oils.
- . **Information for doctor:**
. **Most important symptoms and effects, both acute and delayed** No further relevant information available.
. **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- . **Extinguishing media**
- . **Suitable extinguishing agents:** CO₂, powder, foam
- . **For safety reasons unsuitable extinguishing agents:** Water with full jet
- . **Special hazards arising from the substance or mixture** Carbon monoxide (CO)
- . **Advice for firefighters**
- . **Protective equipment:** No special measures required.

6 Accidental release measures

- . **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- . **Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- . **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
- . **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- . **Handling:**
- . **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- . **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- . **Conditions for safe storage, including any incompatibilities**
- . **Storage:**
- . **Requirements to be met by storerooms and receptacles:** Store only in unopened original receptacles.
- . **Information about storage in one common storage facility:** Not required.
- . **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in the dark.

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. **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

. **Additional information about design of technical facilities:** No further data; see item 7.. **Control parameters**. **Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

. **Additional information:** The lists valid during the making were used as basis.. **Exposure controls**. **Personal protective equipment:**. **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

. **Respiratory protection:** Not required.. **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

. **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

. **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

. **Eye protection:**

Tightly sealed goggles

9 Physical and chemical properties

. **Information on basic physical and chemical properties**. **General Information**. **Appearance:****Form:**

Liquid

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Colour:	Green
Odour:	Characteristic
Change in condition	
Melting point/Melting range:	Undetermined.
Flash point (Pensky Martens DIN 51 758 method):	50°C
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	
Decomposition temperature:	Not determined.
Self-igniting:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
Density at 20°C:	0.848-0.855 g/cm ³
Evaporation rate	Not determined.
Solubility in / Miscibility with water:	Not miscible or difficult to mix.
Other information	No further relevant information available.

10 Stability and reactivity

- . **Reactivity**
- . **Chemical stability**
- . **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- . **Possibility of hazardous reactions** No dangerous reactions known.
- . **Conditions to avoid** No further relevant information available.
- . **Incompatible materials:** No further relevant information available.
- . **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- . **Information on toxicological effects**
- . **Acute toxicity:**
- . **Primary irritant effect:**
- . **on the skin:** Irritant to skin and mucous membranes.
- . **on the eye:** No irritating effect.
- . **Sensitization:** Sensitization possible through skin contact.
- . **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant

12 Ecological information

- . **Toxicity**
- . **Aquatic toxicity:** No further relevant information available.
- . **Persistence and degradability** No further relevant information available.

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- . **Behaviour in environmental systems:**
- . **Bioaccumulative potential** No further relevant information available.
- . **Mobility in soil** No further relevant information available.
- . **Ecotoxicological effects:**
- . **Remark:** Very toxic for fish
- . **Additional ecological information:**
- . **General notes:**
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Also poisonous for fish and plankton in water bodies.
Very toxic for aquatic organisms
- . **Results of PBT and vPvB assessment**
- . **PBT:** Not applicable.
- . **vPvB:** Not applicable.
- . **Other adverse effects** No further relevant information available.

13 Disposal considerations

- . **Waste treatment methods**
- . **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- . **Uncleaned packaging:**
- . **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|-------------------------------------|---|
| . UN-Number | |
| . ADR, IMDG, IATA | UN1169 |
| . UN proper shipping name | |
| . ADR | 1169 EXTRACTS, AROMATIC, LIQUID (not viscous), ENVIRONMENTALLY HAZARDOUS |
| . IMDG, IATA | EXTRACTS, AROMATIC, LIQUID |
| . Transport hazard class(es) | |
| . ADR | |
| |   |
| . Class | 3 (F1) Flammable liquids. |
| . Label | 3 |
| ----- | |
| . IMDG, IATA | |
| |  |
| . Class | 3 Flammable liquids. |
| . Label | 3 |

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. Packing group	
. ADR, IMDG, IATA	III
. Environmental hazards:	
. Marine pollutant:	No
. Special marking (ADR):	Symbol (fish and tree)
. Special precautions for user	Warning: Flammable liquids.
. Danger code (Kemler):	30
. EMS Number:	F-E,S-D
. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
. Transport/Additional information:	

. ADR	
. Tunnel restriction code	D/E
. UN "Model Regulation":	UN1169, EXTRACTS, AROMATIC, LIQUID (not viscous), ENVIRONMENTALLY HAZARDOUS, 3, III

15 Regulatory information

. **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

. **Relevant phrases**

- H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
- R10 Flammable.
R22 Harmful if swallowed.
R38 Irritating to skin.
R43 May cause sensitisation by skin contact.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65 Harmful: may cause lung damage if swallowed.

. **Department issuing MSDS:** Department Essentials Oils

. **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization

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GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

. **Sources** Sandy Sage / Technical Manager

. *** Data compared to the previous version altered.**

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