

SAFETY DATA SHEET

Version 8.6
Revision Date 2023.11.25
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Product Number Aldrich - W216900

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

a. Product name : Buchu leaf oil, Crenulata

Product Number : W216900

Brand : Aldrich

b. Recommended use of the chemical and restrictions on use : **Identified uses**
Laboratory chemicals, For research use only.

c. Company : 씨그마알드리치코리아(유)
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SECTION 2: Hazards identification**a. GHS Classification**

Flammable liquids (Category 3)
Acute toxicity, Oral (Category 4)
Skin corrosion/irritation (Category 2)
Skin sensitization (Category 1)
Carcinogenicity (Category 2)
Aspiration hazard (Category 1)
Long-term (chronic) aquatic hazard (Category 2)

b. GHS-Labeling

Pictogram



Signal Word

Danger

Hazard Statements

H226 Flammable liquid and vapor.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements

Prevention

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use non-sparking tools.
P243 Take action to prevent static discharges.
P261 Avoid breathing mist or vapors.
P264 Wash the contact area thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P321 Specific treatment (see supplemental first aid instructions on this label).
P331 Do NOT induce vomiting.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P391 Collect spillage.

Storage

P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Disposal

P501 Dispose of contents/ container according to waste-related laws

c. Other hazards which do not result in classification

none

SECTION 3: Composition/information on ingredients**3b Mixtures**

Component	Classification	Concentration
(+)-Pulegone		
CAS-No. EC-No.	89-82-7 201-943-2	Flam. Liq. 4; Acute Tox. 4; Carc. 2; H227, H302, H351 >= 45 - < 50 %
(S)-(-)-p-mentha-1,8-diene		
CAS-No. EC-No. Index-No.	5989-54-8 227-815-6 601-029-00-7	Flam. Liq. 3; Skin Corr./Irrit. 2; Skin Sens. 1; Asp. Tox. 1; Aquatic Acute 1; Aquatic Chronic 1; H226, H315, H317, H304, H400, H410 >= 15 - < 20 %
(R)-3,7-Dimethyl-1,6-octadien-3-ol		
CAS-No. EC-No. Index-No.	126-91-0 204-811-2 603-235-00-2	Skin Corr./Irrit. 2; Eye Dam./Irrit. 2; Skin Sens. 1; STOT SE 3; H315, H319, H317, H335 < 1 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures**a. In case of eye contact**

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

b. In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

c. If inhaled

After inhalation: fresh air. Call in physician.

d. If swallowed

After swallowing: caution if victim vomits. Risk of aspiration! Keep airways free. Pulmonary failure possible after aspiration of vomit. Call a physician immediately.

e. Most important acute symptoms/effects

No data available

Most important delayed symptoms/effects

No data available

f. Notes to physician

No data available

General advice

Show this material safety data sheet to the doctor in attendance.

SECTION 5: Firefighting measures

a. Suitable extinguishing media

Foam Carbon dioxide (CO₂) Dry powder

Extinguishing media which shall not be used for safety reasons

For this substance/mixture no limitations of extinguishing agents are given.

b. Specific hazards arising from the chemical

Combustible. Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air at elevated temperatures. Development of hazardous combustion gases or vapours possible in the event of fire.

c. Special protective actions for fire-fighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Further information

Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

a. Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition.

Evacuate the danger area, observe emergency procedures, consult an expert.

b. Environmental precautions

Do not let product enter drains. Risk of explosion.

c. Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g. Chemizorb®).

Dispose of properly. Clean up affected area.

SECTION 7: Handling and storage

a. Precautions for safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

b. Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.

c. Storage class

Storage class (TRGS 510): 3: Flammable liquids

SECTION 8: Exposure controls/personal protection**a. Control parameters**

Contains no substances with occupational exposure limit values.

b. Appropriate engineering controls

No data available

c. Personal protective equipment**Respiratory protection**

required when vapours/aerosols are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Hand protection

required

Eye protection

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

Skin and body protection

Flame retardant antistatic protective clothing.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

SECTION 9: Physical and chemical properties**a. Appearance**

Form	liquid
Color	No data available
b. Odor	characteristic
c. Odor Threshold	No data available
d. pH	No data available
e. Melting point	No data available
f. Initial boiling point	No data available
g. Flash point	No data available
h. Evaporation rate	No data available

i. Flammability (solid, gas)	No data available
j. Lower explosion limit	No data available
Upper explosion limit	No data available
k. Vapor pressure	No data available
l. Water solubility	insoluble
m. Relative vapor density	No data available
n. Density	0.922 g/cm ³
o. Partition coefficient: n- octanol/water	No data available
p. Autoignition temperature	No data available
q. Decomposition temperature	No data available
r. Viscosity, dynamic	No data available
Viscosity, kinematic	No data available
s. Molecular weight	No data available

SECTION 10: Stability and reactivity

a. Chemical stability

No data available

b. Possibility of hazardous reactions

No data available

c. Conditions to avoid

Heating.

d. Incompatible products

Strong oxidizing agents

e. Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known.

Other decomposition products - No data available

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Thermal decomposition

No data available

SECTION 11: Toxicological information**a. Information on likely routes of exposure**

No data available

b. Delayed and immediate effects and also chronic effects from short and long term exposure**Acute toxicity**

Oral: No data available

Acute toxicity estimate Oral - 1,045 mg/kg

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Remarks: Mixture causes skin irritation.

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

Mixture may cause an allergic skin reaction.

Carcinogenicity

Evidence of a carcinogenic effect.

IARC: 2B - Group 2B: Possibly carcinogenic to humans ((+)-Pulegone)

Germ cell mutagenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

Aspiration hazard, Aspiration may cause pulmonary edema and pneumonitis.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

c. Numerical measures of toxicity

No data available

Additional Information**Further information**

Other dangerous properties can not be excluded.
This substance should be handled with particular care.
Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: Ecological information

a. Ecotoxicity effects

No data available

b. Elimination information (persistence and degradability)

No data available

c. Bioaccumulative potential

No data available

d. Mobility in soil

No data available

e. Other adverse effects

No data available

SECTION 13: Disposal considerations

a. Disposal methods

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

SECTION 14: Transport information

IMDG

UN number: 1993 Class: 3

Packing group: III

EMS-No: F-E, S-E

Proper shipping name: FLAMMABLE LIQUID, N.O.S. ((+)-Pulegone, (S)-(-)-p-mentha-1,8-diene)

Marine pollutant : yes

IATA

UN number: 1993 Class: 3

Packing group: III

Proper shipping name: Flammable liquid, n.o.s. ((+)-Pulegone, (S)-(-)-p-mentha-1,8-diene)

SECTION 15: Regulatory information

a. Regulation under the Occupational Safety and Health Act

Harmful Substances Required Permission for Manufacture - Not applicable

Harmful Substances Prohibited from Manufacturing - Not applicable

Harmful Agents to be kept below Occupational Exposure Limits - Not applicable

Controlled Substances Subject to Environment Monitoring - Not applicable

Controlled Substances Subject to Health Examination - Not applicable
Hazardous substances requiring management - Not applicable
Special Management Materials - Not applicable

b. Act on the Registration and Evaluation, etc. of Chemical Substances, Chemicals Control Act

Toxic Chemicals - Not applicable
Restricted Chemicals - Not applicable
Prohibited Chemicals - Not applicable
Accident Precaution Chemicals - Not applicable

c. Dangerous Substances Safety Management Act

Flammable liquids, Type 2 petroleums -Water insoluble liquid

d. Waste Control Act

Follow article 13 of the act to dispose the product waste

e. Other regulations

KECI Number

Not in compliance with the inventory

CAS-No.
89-82-7

5989-54-8

SECTION 16: Other information

a. List of references

b. Issuing date: 2019.11.06

c. Version: 8.6 Revision Date 2023.11.25

e. Further information

Text of H-code(s) and R-phrase(s) mentioned in Section 3

H226	Flammable liquid and vapor.
H227	Combustible liquid.
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.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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