



# SAFETY DATA SHEETS

## 1. Identification

### 1.1 GHS Product identifier

Product name (+)-PULEGONE

### 1.2 Other means of identification

Product number -

Other names PULEGONE

### 1.3 Recommended use of the chemical and restrictions on use

Identified uses For industry use only. Flavouring Agent: FLAVOURING\_AGENT

Uses advised against no data available

### 1.4 Supplier's details

Company Peak Supply Co  
Address 5664 Cahuenga blvd. North Hollywood CA 91601  
Telephone (818) 308-6227

### 1.5 Emergency phone number

Emergency phone number

Service hours Monday to Friday, 9am-5pm (Standard time zone: UTC/GMT +8 hours).

## 2. Hazard identification

### 2.1 Classification of the substance or mixture

Acute toxicity - Oral, Category 4

### 2.2 GHS label elements, including precautionary statements

Pictogram(s)



Signal word Warning

Hazard statement(s) H302 Harmful if swallowed



Precautionary statement(s)	
Prevention	P264 Wash ... thoroughly after handling. P270 Do not eat, drink or smoke when using this product.
Response	P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor/...if you feel unwell. P330 Rinse mouth.
Storage	none
Disposal	P501 Dispose of contents/container to ...

### 2.3 Other hazards which do not result in classification

none

## 3. Composition/information on ingredients

### 3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
(+)-PULEGONE	(+)-PULEGONE	89-82-7	none	100%

## 4. First-aid measures

### 4.1 Description of necessary first-aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### 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

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

no data available

### 4.3 Indication of immediate medical attention and special treatment needed, if necessary



The cases are presented of 3 adult women and a 22-month-old girl who experienced adverse effects following ingestion of pennyroyal (*Mentha pulegium*); the findings were placed in the context of previously reported cases of pennyroyal toxicity. One of the adult patients died after acute ingestion of pennyroyal. The infant was treated with gastric lavage within 30 min of ingestion, followed by 1 g/kg activated charcoal and 2 mL/kg sorbitol. She was then given 190 mg/kg oral acetylcysteine (N-acetylcysteine) followed by 70 mg/kg every 4 hr for a total of 17 doses. The other 2 patients ingested minimally toxic amounts of pennyroyal and recovered without receiving acetylcysteine. In the fatal case, a serum sample obtained 72 hr after acute ingestion contained 18 ng/mL pulegone and 1 ng/mL menthofuran. In a serum sample from the patient treated with acetylcysteine, obtained 10 hr after ingestion, the menthofuran level was 40 ng/mL.

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## 5. Fire-fighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Wear self contained breathing apparatus for fire fighting if necessary. /(R)-(+)-Pulegone/

### 5.2 Specific hazards arising from the chemical

no data available

### 5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

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## 6. Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 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). Keep in suitable, closed containers for disposal. /(R)-(+)-Pulegone/

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## 7. Handling and storage

### 7.1 Precautions for safe handling



Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

## 7.2 Conditions for safe storage, including any incompatibilities

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. / (R)-(+)-Pulegone /

## 8. Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure limit values

no data available

#### Biological limit values

no data available

### 8.2 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### 8.3 Individual protection measures, such as personal protective equipment (PPE)

#### Eye/face protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. 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. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### Respiratory protection

Wear dust mask when handling large quantities.

#### Thermal hazards

no data available

## 9. Physical and chemical properties



Physical state	clear colorless to yellow liquid
Colour	Oil
Odour	Pleasant odor, midway between peppermint and camphor
Melting point/ freezing point	109°C(lit.)
Boiling point or initial boiling point and boiling range	217°C(lit.)
Flammability	no data available
Lower and upper explosion limit / flammability limit	no data available
Flash point	82°C(lit.)
Auto-ignition temperature	no data available
Decomposition temperature	no data available
pH	no data available
Kinematic viscosity	no data available
Solubility	In water, 276 mg/L at 25°C (est)
Partition coefficient n-octanol/water (log value)	log Kow = 3.08
Vapour pressure	138 mm Hg ( 25 °C)
Density and/or relative density	0.937 g/mL at 25°C(lit.)
Relative vapour density	no data available
Particle characteristics	no data available

## 10. Stability and reactivity

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

Stable under recommended storage condition / (R)-(+)-Pulegone/

### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

Strong oxidizing agents. / (R)-(+)-Pulegone/

### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides. / (R)-(+)-Pulegone/

## 11. Toxicological information

Add: 5664 Cahuenga blvd. North Hollywood CA 91601  
Tel: (818) 308-6227

Web: [www.peaksupplyco.com](http://www.peaksupplyco.com)  
Email: [Info@PeakSupplyCo.com](mailto:Info@PeakSupplyCo.com)



#### Acute toxicity

- Oral: LD50 Rats oral 470 mg/kg /R-(+)-pulegone/
- Inhalation: no data available
- Dermal: no data available

#### Skin corrosion/irritation

no data available

#### Serious eye damage/irritation

no data available

#### Respiratory or skin sensitization

no data available

#### Germ cell mutagenicity

no data available

#### Carcinogenicity

no data available

#### Reproductive toxicity

no data available

#### STOT-single exposure

no data available

#### STOT-repeated exposure

no data available

#### Aspiration hazard

no data available

## 12. Ecological information

### 12.1 Toxicity

- Toxicity to fish: no data available
- Toxicity to daphnia and other aquatic invertebrates: no data available
- Toxicity to algae: no data available
- Toxicity to microorganisms: no data available

### 12.2 Persistence and degradability

no data available



### 12.3 Bioaccumulative potential

An estimated BCF of 50 was calculated in fish for pulegone(SRC), using a log Kow of 3.08(1) and a regression-derived equation(1). According to a classification scheme(2), this BCF suggests the potential for bioconcentration in aquatic organisms is moderate(SRC).

### 12.4 Mobility in soil

The Koc of pulegone is estimated as 670(SRC), using a log Kow of 670(1) and a regression-derived equation(2). According to a classification scheme(3), this estimated Koc value suggests that pulegone is expected to have low mobility in soil.

### 12.5 Other adverse effects

no data available

## 13. Disposal considerations

### 13.1 Disposal methods

#### Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

#### Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

## 14. Transport information

### 14.1 UN Number

ADR/RID: UN2574

IMDG: UN2574

IATA: UN2574

### 14.2 UN Proper Shipping Name

ADR/RID: TRICRESYL PHOSPHATE with more than 3% ortho isomer

IMDG: TRICRESYL PHOSPHATE with more than 3% ortho isomer

IATA: TRICRESYL PHOSPHATE with more than 3% ortho isomer

### 14.3 Transport hazard class(es)

ADR/RID: 6.1

IMDG: 6.1

IATA: 6.1

### 14.4 Packing group, if applicable

ADR/RID: II

IMDG: II

IATA: II

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## 14.5 Environmental hazards

ADR/RID: no

IMDG: no

IATA: no

## 14.6 Special precautions for user

no data available

## 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

## 15. Regulatory information

### 15.1 Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
(+)-PULEGONE	(+)-PULEGONE	89-82-7	none
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
EC Inventory			Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
China Catalog of Hazardous chemicals 2015			Not Listed.
New Zealand Inventory of Chemicals (NZIoC)			Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Listed.
Vietnam National Chemical Inventory			Not Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)			Listed.

## 16. Other information

### Information on revision

Creation Date Aug 12, 2017

Revision Date Aug 12, 2017

### Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

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