

## SAFETY DATA SHEET

Version 1.0

Revision Date 06/08/2015

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### 1. PRODUCT AND COMPANY IDENTIFICATION

#### 1.1 Product identifiers

Product name : Pennyroyal Essential Oil  
Product Number : 074  
Brand : Appalachian Valley Natural Products

CAS-No. : 8013-99-8

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

Identified Uses : Manufacturing

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

Company : Appalachian Valley Natural Products  
260 Maple St  
Friendsville MD 21531

Telephone : (301)746-4630

Fax : (301)746-4633

#### 1.4 Emergency telephone number

Emergency Phone# : (800)424-9300 FOR TRANSPORT EMERGENCIES ONLY

### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

**Physical hazards** Flammable liquids Category 4

**Health hazards** Acute toxicity, oral Category 4

Acute toxicity, dermal Category 5

Skin corrosion/irritation Category 3

Carcinogenicity Category 2

**Environmental hazards:** Hazardous to the aquatic Category 3

Environment, acute hazard

Hazardous to the aquatic Category 3

Environment, long-term hazard

#### 2.2 GHS Label elements, including precautionary statements

Pictogram



## Hazard statement(s)

H227	Combustible liquid.
H302	Harmful if swallowed.
H313	May be harmful in contact with skin
H316	Causes mild skin irritation
H351	Suspected of causing cancer
H402	Harmful to aquatic life
H412	Harmful to aquatic life with long lasting effects

## Precautionary statement(s)

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking
P264	Wash thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P273	Avoid release to the environment
P280	Wear protective gloves/eye protection/face protection
P310+P312	IF SWALLOWED: Call POISON CENTER/doctor if feeling unwell
P308+P313	IF exposed or concerned: Get medical advice/attention
P312	Call a POISON CENTER/doctor if you feel unwell
P330	Rinse mouth
P332+P313	If skin irritation occurs: Get medical advice/attention
P370+P378	In case of fire: Use appropriate media to extinguish
P403+P235	Store in well-ventilated place. Keep cool
P405	Store locked up
P501	Dispose of contents/container in accordance with local/regional/national/International regulations.
<b>Hazard(s) not otherwise Classified (HNOC)</b>	None known

**Supplemental information** None

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS – none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

CAS-No.	: 89-82-7
Synonyms	: (5R)-5-methyl-2-propan-2-ylidenecyclohexan-1-one
	: Delta-4,8-p-methen-3-one

#### Hazardous components

Component	Concentration
<b>p-Menth-4(8)-3n-3-one</b>	
	<= 100%

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

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**If inhaled**

If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. For breathing difficulties, oxygen may be necessary. Call a physician if symptoms develop or persist.

**In case of skin contact**

Take off immediately all contaminated clothing. Get medical attention if irritation develops and persists. Wash skin thoroughly with soap and water for several minutes.

**In case of eye contact**

Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists. Promptly wash eyes with plenty of water while lifting eye lids.

**If swallowed**

Call a physician or poison control center immediately. If swallowed, rinse mouth with water (only if The person is conscious). Do not induce vomiting. If vomiting occurs, the head should be kept low so that The stomach vomit doesn't enter lungs.

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

Direct contact with eyes may cause temporary irritation. Mild skin irritation.

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

No data available

**Make sure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.**

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**5. FIREFIGHTING MEASURES****5.1 Extinguishing media****Suitable extinguishing media**

Use water spray, fog, CO<sub>2</sub>, dry chemical or alcohol resistant foam. Do not use solid water stream as it may Scatter and spread fire. Fire may produce irritating, corrosive, and/or toxic gases.

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection. Wear self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode when fighting fires.

In case of fire and/or explosion, do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area and if you can do so without risk. Water runoff can cause environmental damage. Ventilate closed spaces before entering them. Keep run-off water out of sewers and water sources. Dike for water control

Use water spray to cool unopened containers.

**5.2 Further Information**

Static charges generated by emptying package in or near flammable vapor may cause flash fire.

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**6. ACCIDENTAL RELEASE MEASURES**

Keep unnecessary personnel away. Eliminate all sources of ignition. Avoid contact with skin or inhalation of spillage, dust or vapor. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing. Ventilate closed spaces before entering them.

Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps.

The product is immiscible with water and will spread on the water surface.

Large Spills: Stop the flow of material, it is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Prevent product from entering drains. Do not allow material to contaminate ground water system. Absorb in vermiculite, dry sand or earth and place into containers.

Small spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use. This material and its container must be disposed of as hazardous waste. Collect and dispose of spillage as indicated in section 13 of the SDS.

Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid release to the environment. Retain and dispose of contaminated wash water. Contact local authorities in case of spillage to drain/aquatic environment.

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## 7. HANDLING AND STORAGE

Do not handle or store near an open flame, heat or other sources of ignition. Take precautionary measures against static discharges. All equipment used when handling this product must be grounded. Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wash thoroughly after handling.

Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in cool, well-ventilated area.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

#### Appropriate engineering controls

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

#### Personal protective equipment

##### Eye/face protection

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

##### Skin protection

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.

##### Full Contact

Material: Nitrile Rubber

Minimum layer thickness: 0.11mm

Break through time: 480 min

##### Splash contact

Material: Nitrile Rubber

Minimum layer thickness: 0.11mm

Break through time: 480min

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be constructed as offering an approval for any specific use scenario.

### **Body Protection**

Complete suit protecting against chemicals. Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### **Respiratory Protection**

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### **Control of environmental exposure**

Do not let product enter drains.

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## **9. PHYSICAL AND CHEMICAL PROPERTIES**

### **9.1 Information on basic physical and chemical properties**

a) Appearance	Form: liquid
b) Odour	No data available
c) Odour Threshold	No data available
d) pH	No data available
e) Melting point/freezing point	No data available
f) Initial boiling point and boiling range	435.2 °F (224 °C)
g) Flash point	192.0 °F (88.9 °C) Closed cup
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	No data available
k) Vapour pressure	< 0 mm HG
l) Vapour density	5.3
m) Relative density	No data available
n) Water solubility	Insoluble
o) Partition coefficient: n-octanol/water	No data available
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	No data available

### **9.2 Other safety information**

Flammability class	Combustible IIIA estimated
Molecular formula	C10H16O
Molecular weight	152.24 g/mol
Specific gravity	0.93 at 25 °C

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## **10. STABILITY AND REACTIVITY**

- 10.1 Reactivity**  
No data available
- 10.2 Chemical stability**  
Stable under recommended storage conditions.
- 10.3 Possibility of hazardous reactions**  
No data available
- 10.4 Conditions to avoid**  
Heat, flames and sparks.
- 10.5 Incompatible materials**  
Strong oxidizing agents
- 10.6 Hazardous decomposition products**  
No hazardous decomposition products if stored and handled as indicated.
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## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

No data available

Inhalation: No adverse effects due to inhalation are expected.

Dermal: May be harmful in contact with skin. Causes mild skin irritation.

Eye contact: Direct contact with eyes may cause temporary irritation. Causes mild eye irritation.

Ingestion: Harmful if swallowed.

#### Skin corrosion/irritation

Mild skin irritation

**Harmful if swallowed. May be harmful in contact with skin.**

p-Menth-4(8)-en-3-one (CAS 89-82-7)

Acute

Dermal

LD50	Rabbit	3,090 mg/kg
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Oral

LD50	Rat	470 mg/kg
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\*Estimates for the product may be based on additional component data not shown.

#### Germ cell mutagenicity

Mouse

Mouse lymphoma cells

Result: negative

#### Carcinogenicity

IARC: Monographs. Overall Evaluation of Carcinogenicity  
p-Menth-4(8)-en-3-one (CAS 89-82-7)

OSHA: Specifically Regulated Substances (29 CFR 1910.1001-1050)

#### Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

#### Specific target organ toxicity – single exposure

No data available

**Specific target organ toxicity – repeated exposure**

No data available

**Aspiration hazard**

No data available.

**Chronic effects**

Prolonged exposure may cause chronic effects.

**Additional Information**

RTECS: Not available

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

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**12. ECOLOGICAL INFORMATION**

**Ecotoxicity** Harmful to aquatic life with long lasting effects.

Product:	Species:	Test results:
p-Menth-4(8)-en-3-one (CAS 89-82-7)		
Aquatic		
Crustacea	EC50 Water flea (Daphnia pulex)	24.4 mg/l, 48 hours

\*Estimates for product may be based on additional component data not shown.

Persistence and degradability:	No data available
Bioaccumulative potentiation:	No data available
Mobility in soil:	No data available
Other adverse effects:	No other adverse effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

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**13. DISPOSAL CONSIDERATIONS**

<b>Disposal instructions</b>	Do not discharge into drains, water courses or onto the ground. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations
<b>Hazardous waste code</b>	Not established
<b>Waste from residues/ unused Products</b>	Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safer manner (see: Disposal instructions).
<b>Contaminated package</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

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**14. TRANSPORT INFORMATION**

**ADN**

Not dangerous goods.

**ADR**

Not dangerous goods.

## **RID**

Not dangerous goods.

## **DOT**

### **BULK**

<b>UN NUMBER:</b>	NA1993
<b>Proper Shipping name:</b>	COMBUSTIBLE LIQUID, N.O.S. (p-Menth-4(8)-en-3-one)
<b>Hazard class</b>	Combustible liq
<b>Packing group</b>	III
<b>Environmental hazards</b>	
<b>Marine Pollutant</b>	No
<b>Special provisions</b>	IB3, T1, T4, TP1
<b>Packaging exceptions</b>	150
<b>Packaging bulk</b>	241

## **DOT**

### **NON-BULK**

Not regulated as dangerous goods

## **IATA**

Not regulated as dangerous goods

## **IMDG**

Not regulated as dangerous goods

## **DOT BULK**



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## **15. REGULATORY INFORMATION**

### **US federal regulations**

This product is a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### **CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed

#### **US OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed

#### **SARA 304 Emergency release notification**

Not regulated.

#### **OSHA Specifically Regulated Substances (20 CFR 1910.1001-1050)**

Not listed

#### **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.



**SARA 302 Components**

Not listed.

**SARA 311/312 Hazardous chemical** Yes**SARA 313 Components**

Not regulated

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated

**Clean Air Act (CAA) Section 112 (r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated

**Safe Drinking Water Act** Not regulated**US state regulations****Massachusetts Right To Know Components**

Not Listed

**Pennsylvania Right To Know Components**

Not listed.

**New Jersey Right To Know Components**

Not listed

**Rhode Island RTK**

Not regulated

**California Pro. 65****US – California Proposition 65 – Carcinogens & Reproductive Toxicity (CRT): Listed substance**

p-Menth-4(8)-en-3-one (CAS 89-82-7)

**US – California Proposition 65 – CRT: Listed data/Carcinogenic substance**

p-Menth-4(8)-en-3-one (CAS 89-82-7) Listed: April 18, 2014 Carcinogenic

**International Inventories**

<b>Country(s) or region</b>	<b>Inventory Name</b>	<b>On inventory (yes/no)</b>
Australia	Australian Inventory of chemical substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).

A “No” indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

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#### Disclaimer

#### **Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Appalachian Valley Natural Products shall not be held liable for any damage resulting from handling or from contact with the above product.

#### **Preparation Information**

Appalachian Valley Natural Products