



SAFETY DATA SHEET

EUCALYPTOL NATURAL

Version # 01

Revision Date: 07/15/2019

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1. IDENTIFICATION

Product Description: EUCALYPTOL

CAS # 470-82-6

FEMA Number 2465

Recommended use

Concentrated aromatic and flavor ingredient which may be used in flavor and fragrance compounds according to legal and IFRA or FEMA GRAS/FDA guidelines.

Recommended restrictions For Manufacturing Use Only

24 Hour Emergency Response Information

INFOTRAC (ACCT# 78928);
1-800-535-5053 WITHIN THE U.S.A.
1-352-323-3500 OUTSIDE THE U.S.A.

Web Site:

www.foggflavors.com

Company:

Fogg Flavor Labs, LLC
319 Newburyport Turnpike
Rowley, MA 01969
1-888-822-7364

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Fogg Flavor Labs, LLC
319 Newburyport Turnpike
Rowley, MA 01969
United States

1-888-822-7364

Emergency phone number INFOTRAC (ACCT# 78928);
1-800-535-5053 WITHIN THE U.S.A.
1-352-323-3500 OUTSIDE THE U.S.A.

E-mail support@foggflavors.com

Website www.foggflavors.com



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2. HAZARD(S) IDENTIFICATION

Physical hazards

Flammable liquids Category 3

Health hazards

Acute toxicity, oral

Category 5

Acute toxicity, dermal

Category 3

Skin corrosion/irritation

Category 1

Sensitization, skin

Category 1

Environmental hazards

Hazardous to the aquatic environment, acute hazard

Category 3

Hazardous to the aquatic environment, long-term hazard

Category 3

Label elements



Signal word

Warning

Hazard statement

Flammable liquid and vapor. May be harmful if swallowed.
Causes mild skin irritation. May cause an allergic skin reaction.



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

Precautionary statement

Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Call a POISON CENTER/doctor if you feel unwell. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish.

Storage

Store in a well-ventilated place. Keep cool. Store locked up.

Disposal

Store in a well-ventilated place. Keep cool.

Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information

100% of the substance consists of component(s) of unknown acute inhalation toxicity.



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3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Chemical name	Common name and synonyms	CAS number	%
EUCALYPTOL	4,7,7-trimethyl-8-oxabicyclo[2.2.2]octane 1,8-cineole 1,3,3-trimethyl oxabicyclo(2.2.2)octane 1,8-oxi-do-para-menthane	470-82-6	100

4. FIRST-AID MEASURES

Inhalation

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.

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.



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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 the eye lids.

Ingestion

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 stomach vomit doesn't enter the lungs.

Most important symptoms/effects, acute and delayed

Direct contact with eyes may cause temporary irritation. Mild skin irritation. May cause an allergic skin reaction. Dermatitis. Rash

Indication of immediate medical attention and special treatment needed

Not available.

General information

Ensure 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.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water spray, fog, CO₂, dry chemical, or alcohol resistant foam.

Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Fire may produce irritating, corrosive and/or toxic gases.

Special protective equipment and precautions for firefighters



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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.

Fire fighting equipment/instructions

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 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.

Specific methods

Use water spray to cool unopened containers.

General fire hazards

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Eliminate all sources of ignition. Avoid contact with skin or inhalation of spillage, dust or vapor. Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Personal precautions, protective equipment and emergency procedures Collect and dispose of spillage as indicated in section 13 of the SDS.



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Methods and materials for containment and cleaning up

Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps. Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Never return spills in original containers for re-use. This material and its container must be disposed of as hazardous waste. Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Prevent product from entering drains. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. 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.

Environmental precautions

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

7. HANDLING AND STORAGE

Precautions for safe handling

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 the product must be grounded. Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

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



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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

This substance has no PEL, TLV, or other recommended exposure limit.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Use explosion-proof ventilation equipment to stay below exposure limits.

Individual protection measures, such as personal protective equipment

Eye/face protection

Face shield is recommended.

Skin protection

Hand protection

Chemical resistant gloves.

Other

Use of an impervious apron is recommended.

Respiratory protection

Respiratory protection not required. If ventilation is insufficient, suitable respiratory protection must be provided.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.



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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Refer to Spec Sheet
Physical state	Liquid.
Form	Liquid.
Color	Refer to Spec Sheet
Odor	Characteristic
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	34.7 °F (1.5 °C)
Initial boiling point and boiling range	Not available.
Flash point	113.0 °F (45.0 °C) Closed Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	0.25 kPa (77 °F (25 °C))
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Insoluble
Partition coefficient (n-octanol/water)	2.74
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	0.93 g/cm ³ at 20 °C
Explosive properties	Not explosive.
Flammability class	Combustible II estimated
Molecular formula	C ₁₀ -H ₁₈ -O
Molecular weight	154.25 g/mol
Oxidizing properties	Not oxidizing.



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Specific gravity 0.93 at 25 °C

10. STABILITY AND REACTIVITY

Reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability

Material is stable under normal conditions.

Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

No hazardous decomposition products if stored and handled as indicated.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation

Knowledge about health hazard is incomplete.



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Skin contact

Causes mild skin irritation. May cause an allergic skin reaction

Eye contact

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

Ingestion

May be harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Mild skin irritation. May cause an allergic skin reaction.
Dermatitis. Rash.

Information on toxicological effects

Acute toxicity May be harmful if swallowed.

Product	Species	Test Results
EUCALYPTOL (CAS 470-82-6)		
Acute		
Dermal LD50	Rabbit	> 5000 mg/kg
Oral LD50	Rat	2480 mg/kg Remarks: Behavioral:Somnolence (general depressed activity). Behavioral:Coma.

Skin corrosion/irritation

Causes mild skin irritation. Skin - rabbit: Result: No skin irritation



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Serious eye damage/eye irritation

Due to partial or complete lack of data the classification is not possible.

Respiratory or skin sensitization Respiratory sensitization

Due to partial or complete lack of data the classification is not possible.

Skin sensitization

May cause an allergic skin reaction

Germ cell mutagenicity

Hamster - ovary: Sister chromatid exchange Due to partial or complete lack of data the classification is not possible.

Carcinogenicity

Due to partial or complete lack of data the classification is not possible.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity

Due to partial or complete lack of data the classification is not possible. Reproductive toxicity - rat - Subcutaneous: Effects on Newborn: Biochemical and metabolic.

Specific target organ toxicity - single exposure

Not classified.

Specific target organ toxicity - repeated exposure



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Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. DISPOSAL CONSIDERATIONS

Disposal instructions

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

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

Not established.

Waste from residues / unused products

Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.



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14. TRANSPORT INFORMATION

ADN

UN number 1197
UN proper shipping name EXTRACTS, FLAVOURING, LIQUID
Transport hazard class(es) 3
Subsidiary class(es) - Packing group III
Environmental hazards No
Labels required 3

ADR

UN number 1197
UN proper shipping name EXTRACTS, FLAVOURING, LIQUID
Transport hazard class(es) 3
Subsidiary class(es) - Packing group III
Environmental hazards No
Labels required 3

RID

UN number 1197
UN proper shipping name EXTRACTS, FLAVOURING, LIQUID
Transport hazard class(es) 3
Subsidiary class(es) - Packing Group III
Environmental Hazards No
Labels required 3
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

DOT

BULK

UN number 1197
Proper shipping name EXTRACTS, FLAVOURING, LIQUID
Hazard class 3
Packing group III



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Marine pollutant No Environmental hazards
Packaging exceptions 150
Packaging bulk 242
Labels required 3

DOT

NON-BULK

Not regulated as dangerous goods.

IATA

UN number 1197
UN proper shipping name EXTRACTS, FLAVOURING, LIQUID
Transport hazard class(es) 3
Subsidiary class(es) -
Packing group III
Environmental hazards No
Labels required 3

IMDG

UN number 1197
UN proper shipping name EXTRACTS, FLAVOURING, LIQUID
Transport hazard class(es) 3
Subsidiary class(es) -
Packing group III
Environmental hazards
Marine pollutant No
Labels required 3
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable.



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ADN; ADR; DOT BULK; IATA; IMDG; RID



15. REGULATORY INFORMATION

US federal regulations

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

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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

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

Not available.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not listed



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Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Not listed.

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

Yes

Classified hazard categories

Flammable (gases, aerosols, liquids, or solids) Respiratory or skin sensitization

SARA 313 (TRI reporting)

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 (SWDA)

Not regulated.

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Issue date	08-08-2020
Revision date	08-08-2020
Version	# 01
HMIS® ratings	
Health:	2
Flammability:	2
Physical hazard:	0



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Disclaimer

Fogg Flavor Labs, LLC. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available. The above information relates only to this product and not to its use in combination with any other material or any particular process and is designed only as guidance for the safe handling, use, processing, storage, transportation, and disposal and should not be considered as a guarantee or quality specification. This product has not been evaluated for safe use in e-cigarettes or any vaping application where the product(s) is/are intentionally vaporized and inhaled. Fogg Flavor Labs, LLC has performed no testing on these products in e-cig/vaping applications. It is the sole responsibility of the individual(s) purchasing this product to assess its' safety in the final application. The above information relates only to this product and not to its use in combination with any other material or any particular process and is designed only as guidance for the safe handling, use, processing, storage, transportation, disposal, and should not be considered as a guarantee or quality specification. The above information is based on data provided by and collected from recognized sources such as distributors, manufacturers, and technical groups and is considered to be accurate to the best of Fogg Flavor Labs, LLC's knowledge as of the date of this document. It is the responsibility of the user to review all safety information about this product and determine its safety and suitability in their own processes and operations. Appropriate warnings and safe handling procedures should be provided to all handlers and users, taking into account the intended use and the specific conditions and factors relating to such use in accordance with all applicable laws and regulations.

Revision information This document has undergone significant changes and should be reviewed in its entirety.