

SAFETY DATA SHEET

FRASIER FIR FRAGRANCE OIL

1. PRODUCT INFORMATION AND COMPANY IDENTIFICATION

Product Name: Frasier Fir Fragrance Oil

Company: Natural Bulk Supplies, 318 Half Day Rd, # 348,
Buffalo Grove, IL 60089 Phone: 847-489-7180

Emergency Contact: Infotrac: 800-535-5053(North America) +1-352-323-3500 (International)

2. HAZARD IDENTIFICATION

Classification of the substance or mixture

Class and category of danger:

Flammable Liquid, Hazard Category 4

Skin Corrosion / Irritation Category 3

Eye Damage / Irritation Category 2

Sensitization - Skin Category 1

Hazardous to the Aquatic Environment - Acute Hazard Category 1

Hazardous to the Aquatic Environment - Long-term Hazard Category 1

H227, Combustible liquid.

H316, Causes mild skin irritation.

H317, May cause an allergic skin reaction.

H319, Causes serious eye irritation.

H410, Very toxic to aquatic life with long lasting effects.

Label elements

Signal word: Warning

Hazard statements:

H227, Combustible liquid.

H316, Causes mild skin irritation.

H317, May cause an allergic skin reaction.

H319, Causes serious eye irritation.

H410, Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P210, Keep away from heat, sparks, open flames and hot surfaces. - No smoking.
P261, Avoid breathing vapour or dust.
P264, Wash hands and other contacted skin thoroughly after handling.
P272, Contaminated work clothing should not be allowed out of the workplace.
P273, Avoid release to the environment.
P280, Wear protective gloves/eye protection/face protection.
P302/352, IF ON SKIN: Wash with plenty of soap and water.
P305/351/338, IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333/313, If skin irritation or rash occurs: Get medical advice/attention.
P337/313, If eye irritation persists: Get medical advice/attention.
P363, Wash contaminated clothing before reuse.
P370/378, In case of fire: Use carbon dioxide, dry chemical, foam for extinction.
P391, Collect spillage.
P403/235, Store in a well-ventilated place. Keep cool.
P501, Dispose of contents/container to approved disposal site, in accordance with local regulations.

Pictograms:



Other hazards Other hazards:

Hydrocarbon Concentration %: 3.0543%

3. COMPOSITION/INFORMATION ON INGREDIENTS

Contains:

Name	CAS	%	GHS Classification
Isobornyl acetate	0125-12-2	20–<50%	Flam. Liq. 4 · Skin Irrit. 3 · Aquatic Acute 2; H227 · H316 · H401
Diethyl malonate	105-53-3	5–<10%	Flam. Liq. 4 · Eye Irrit. 2A · Aquatic Acute 3; H227 · H319 · H402
1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylcyclopentagamma-2-benzopyran	1222-05-05	5–<10%	Skin Irrit. 3 · Aquatic Acute 1 · Aquatic Chronic 1; H316 · H410

Cedrol	77-53-2	1—<5%	Aquatic Acute 2 · Aquatic Chronic 2; H411
alpha-Pinene	80-56-8	1—<5%	Flam. Liq. 3 · Acute Tox. 4 · Skin Irrit. 2 · Skin Sens. 1B · Asp. Tox. 1 · Aquatic Acute 1 · Aquatic Chronic 1; H226 · H302 · H304 · H315 · H317 · H410
laevo-Bornyl acetate	5655-61-8	1—<5%	Skin Irrit. 3 · Aquatic Acute 2; H316 · H401
2,4-Dimethyl-3-cyclohexen-1-carboxaldehyde	68039-49-6	1—<5%	Flam. Liq. 4 · Acute Tox. 5 · Skin Irrit. 2 · Skin Sens. 1B · Aquatic Acute 2 · Aquatic Chronic 2; H227 · H303 · H315 · H317 · H411
alpha-Cedrene	469-61-4	1—<5%	Skin Irrit. 2 · Asp. Tox. 1 · Aquatic Acute 1 · Aquatic Chronic 1; H304 · H315 · H410
2-Ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	28219-61-6	1—<5%	Skin Irrit. 2 · Eye Irrit. 2B · Aquatic Acute 2 · Aquatic Chronic 2; H315 · H320 · H411
Ethyl maltol	4940-11-8	1—<5%	Acute Tox. 4 · Aquatic Acute 2; H302 · H401
Camphene	79-92-5	1—<5%	Flam. Sol. 2 · Eye Irrit. 2B · Aquatic Acute 1 · Aquatic Chronic 1; H228 · H320 · H410
4-(p-Hydroxyphenyl)-2-butanone	5471-51-2	1—<5%	Aquatic Acute 3; H402
delta-3-Carene	13466-78-9	0.1—<1%	Flam. Liq. 3 · Acute Tox. 5 · Acute Tox. 4 · Skin Irrit. 2 · Skin Sens. 1 · Asp. Tox. 1 · Aquatic Acute 2 · Aquatic Chronic 2; H226 · H303 · H304 · H315 · H317 · H332 · H411
beta-Caryophyllene	87-44-5	0.1—<1%	Skin Sens. 1B · Asp. Tox. 1; H304 · H317
beta-Pinene	127-91-3	0.1—<1%	Flam. Liq. 3 · Skin Irrit. 2 · Skin Sens. 1B · Asp. Tox. 1 · Aquatic Acute 1 · Aquatic Chronic 1; H226 · H304 · H315 · H317 · H410

l-Borneol	464-45-9	0.1—<1%	Flam. Sol. 1 · Skin Irrit. 2 · Aquatic Acute 2; H228 · H315 · H401
Terpinolene	586-62-9	0.1—<1%	Flam. Liq. 4 · Acute Tox. 5 · Skin Irrit. 3 · Skin Sens. 1B · Asp. Tox. 1 · Aquatic Acute 1 · Aquatic Chronic 1; H227 · H303 · H304 · H316 · H317 · H410
d-Limonene	5989-27-5	0.1—<1%	Flam. Liq. 3 · Skin Irrit. 2 · Skin Sens. 1B · Asp. Tox. 1 · Aquatic Acute 1 · Aquatic Chronic 3; H226 · H304 · H315 · H317 · H400 · H412
l-Limonene	5989-54-8	0.1—<1%	Flam. Liq. 3 · Skin Irrit. 2 · Skin Sens. 1B · Asp. Tox. 1 · Aquatic Acute 1 · Aquatic Chronic 3; H226 · H304 · H315 · H317 · H400 · H412
beta-Cedrene	546-28-1	0.1—<1%	Skin Irrit. 2 · Aquatic Acute 1 · Aquatic Chronic 1; H315 · H410
Camphor	76-22-2	0.1—<1%	Flam. Sol. 2 · Acute Tox. 4 · Acute Tox. 4 · Skin Irrit. 2 · Eye Dam. 1 · STOT SE 2 · Aquatic Acute 2 · Aquatic Chronic 2; H228 · H302 · H315 · H318 · H332 · H371 · H411
beta-Phellandrene	0555-10-2	0.1—<1%	Flam. Liq. 3 · Skin Sens. 1 · Asp. Tox. 1; H226 · H304 · H317
Borneol	507-70-0	0.1—<1%	Flam. Sol. 1 · Skin Irrit. 2 · Eye Dam. 1 · Aquatic Acute 2 · Aquatic Chronic 2; H228 · H315 · H318 · H411

Substances with workplace exposure limits, not listed above:

Not Applicable

4. FIRST AID MEASURES

Description of first aid measures

Inhalation:

Remove from exposure site to fresh air, keep at rest, and obtain medical attention.

Eye exposure:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Skin exposure:

IF ON SKIN: Wash with plenty of soap and water.

Ingestion:

Rinse mouth with water and obtain medical attention.

Most important symptoms and effects, both acute and delayed

Causes mild skin irritation

May cause an allergic skin reaction.

Causes serious eye irritation.

Indication of any immediate medical attention and special treatment needed

None expected, see Section 4.1 for further information.

5. FIRE FIGHTING MEASURES

Extinguishing media

Suitable media: Carbon dioxide, Dry chemical, Foam.

Special hazards arising from the substance or mixture

In case of fire, may be liberated: Carbon monoxide, Unidentified organic compounds.

Advice for fire fighters:

In case of insufficient ventilation, wear suitable respiratory equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Avoid inhalation. Avoid contact with skin and eyes. See protective measures under Section 7 and 8.

Environmental precautions:

Keep away from drains, surface and ground water, and soil.

Methods and material for containment and cleaning up:

Remove ignition sources. Provide adequate ventilation. Avoid excessive inhalation of vapours. Contain spillage immediately by use of sand or inert powder. Dispose of according to local regulations.

Reference to other sections:

Also refer to sections 8 and 13.

7. HANDLING AND STORAGE

Precautions for safe handling:

Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Use personal protective equipment as required. Use in accordance with good manufacturing and industrial hygiene practices. Use in areas with adequate ventilation Do not eat, drink or smoke when using this product. Section

Conditions for safe storage, including any incompatibilities:

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Ground/bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

Specific end use(s):

Fragrances: Use in accordance with good manufacturing and industrial hygiene practices.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters Workplace exposure limits:

Not Applicable

Exposure Controls

Eye / Skin Protection

Wear protective gloves/eye protection/face protection

Respiratory Protection

Under normal conditions of use and where adequate ventilation is available to prevent build up of excessive vapour, this material should not require special engineering controls. However, in conditions of high or prolonged use, or high temperature or other conditions which increase exposure, the following engineering controls can be used to minimise exposure to personnel:

a) Increase ventilation of the area with local exhaust ventilation. b) Personnel can use an approved, appropriately fitted respirator with organic vapour cartridge or canisters and particulate filters. c) Use closed systems for transferring and processing this material.

Also refer to Sections 2 and 7.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Free flowing liquid without sediment
Odour	Characteristic
Odour threshold	Not determined

pH	Not determined
Melting point / Freezing point	Not determined
Initial boiling point / Range	Not determined
Flash point	79 °C
Evaporation rate	Not determined
Flammability (solid, gas)	Not determined
Upper / lower flammability or explosive limits	Product does not present an explosion hazard
Vapour pressure	Not determined
Vapour density	Not determined
Relative density	0.9340 - 0.9640
Solubility(ies)	Not determined
Partition coefficient (n-octanol/water)	Not determined
Auto-ignition temperature	Not determined
Decomposition temperature	Not determined
Viscosity	Not determined
Explosive properties	Not expected
Oxidising properties	Not expected

Other information:

Flash Point (Fahrenheit): 174 °F

Refractive Index @ 20C: 1.4570 - 1.4670

Color Range: 3 Very Pale Yellow - 1 Very Pale Yellow

Calculated VOC: 11.50

10. STABILITY AND REACTIVITY

Reactivity:

Presents no significant reactivity hazard, by itself or in contact with water.

Chemical stability:

Good stability under normal storage conditions.

Possibility of hazardous reactions:

Not expected under normal conditions of use.

Conditions to avoid:

Avoid extreme heat.

Incompatible materials:

Avoid contact with strong acids, alkalis or oxidising agents.

Hazardous decomposition products:

Not expected.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

This mixture has not been tested as a whole for health effects. The health effects have been calculated using the methods outlined in UN GHS.

Acute Toxicity:

Based on available data the classification criteria are not met.

Acute Toxicity Oral >5000

Acute Toxicity Dermal Not Applicable

Acute Toxicity Inhalation Not Available

Skin corrosion/irritation: Skin Corrosion / Irritation Category 3

Serious eye damage/irritation: Eye Damage / Irritation Category 2

Respiratory or skin sensitisation: Sensitization - Skin Category 1

Germ cell mutagenicity: Based on available data the classification criteria are not met.

Carcinogenicity: Based on available data the classification criteria are not met.

Reproductive toxicity: Based on available data the classification criteria are not met.

STOT-single exposure: Based on available data the classification criteria are not met.

STOT-repeated exposure: Based on available data the classification criteria are not met.

Aspiration hazard: Based on available data the classification criteria are not met.

Information about hazardous ingredients in the mixture

Ingredient	CAS	LD50/ATE Oral (mg/kg)	LD50/ATE Dermal (mg/kg)	LC50/ATE Inhalation	LC50 Route
2,4-Dimethyl-3-cyclohexen-1-carboxaldehyde	68039-49-6	2330	Not available	Not available	Not available
Ethyl maltol	4940-11-8	1200	Not available	Not available	Not available
alpha-Pinene	80-56-8	500	Not available	Not available	Not available

Refer to Sections 2 and 3 for additional information.

12. ECOLOGICAL INFORMATION

Toxicity:

Very toxic to aquatic life with long lasting effects.

Persistence and degradability: Not available

Bioaccumulative potential: Not available

Mobility in soil: Not available

Other adverse effects: Not available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

Dispose of in accordance with local regulations. Avoid disposing into drainage systems and into the environment. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

	UN number:	UN Proper Shipping Name:	Transport hazard class (es):	Sub Risk:	Packing Group:
UN Model Regulations	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alphaCedrene, 1,3,4,6,7,8-Hexahydro4,6,6,7,8, 8-hexamethylcyclopentagamma -2-benzopyran)	9	-	III
IMDG	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alphaCedrene, 1,3,4,6,7,8-Hexahydro4,6,6,7,8, 8-hexamethylcyclopentagamma -2-benzopyran) MARINE POLLUTANT	9	-	III
ADR,RID,ADN	UN3082	ENVIRONMENTALLY	9	-	III

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		HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alphaCedrene, 1,3,4,6,7,8-Hexahydro4,6,6,7,8, 8-hexamethylcyclopentagamma -2-benzopyran)			
ICAO TI	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alphaCedrene, 1,3,4,6,7,8-Hexahydro4,6,6,7,8, 8-hexamethylcyclopentagamma -2-benzopyran)	9	-	III

Environmental hazards:

This is classified as an environmentally hazardous substance under the UN Model Regulations. This is classified as a Marine Pollutant under the IMDG Code.

Special precautions for user:

None additional

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:

Not applicable

15. REGULATORY INFORMATION

Essential Oil Components:

Name	CAS	%
Cedarwood oil, Virginian	85085-41-2, 8000-27-9	5-<10%
Fir needle oil, Siberian	91697-89-1, 8021-29-2	5-<10%
Orange peel, sweet, oil	8028-48-6, 8008-57-9	0.1-<1%

Components listed on California's Proposition 65:

Name	CAS	%
Myrcene	123-35-3	<0.1%

Naturally-Occurring Materials exempt from Prop65:

Name	CAS	%
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Myrcene	123-35-3	
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Components listed on California's SB312

Name	CAS	%
Di-(2-ethylhexyl) adipate	103-23-1	20-<50%

16. OTHER INFORMATION

Concentration % Limits:

SCI 3=8.21% EDI 2A=80.85% SS 1=57.40% EH A1=94.29% EH A2=8.52% EH A3=0.84942599% EH C1=97.43% EH C2=9.54% EH C3=0.95361247% EH C4=80.04%

Total Fractional Values:

SCI 3=12.18 EDI 2A=1.24 SS 1=1.74 EH A1=1.06 EH A2=11.74 EH A3=117.73 EH C1=1.03 EH C2=10.49 EH C3=104.86 EH C4=1.25

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