

PLUME™

THE ART OF ATMOSPHERE

Safety Data Sheet

This Safety Data Sheet was prepared using supplier hazard data and classified in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Revision 1.0 | August 26, 2026

24-HOUR EMERGENCY CONTACT

CHEMTREC 1-800-424-9300

Contract ID: CCN1026268

SECTION 1

Identification

Product Name	December
Product Code / SKU	P-CA-55
Product Type	Fragrance Oil Blend
Collection	Calendar
Manufacturer	PLUME™ Louisiana, USA www.PlumeFragrance.com contact@plumefragrance.com

Recommended Use

Fragrance ingredient for candles, melts, soap and home fragrance products. PLUME™ fragrances are carefully developed to deliver exceptional performance in candle applications while remaining versatile for use across multiple fragranced products when used within applicable IFRA usage limits.

Restrictions on Use

Supplied as a fragrance ingredient for further manufacturing only. Not intended to be used undiluted or as a finished consumer product. Do not use in food, drugs, or apply directly to skin unless the finished product has been appropriately formulated, evaluated for safety, and complies with applicable regulations and IFRA Standards.

Prepared By PLUME™ Regulatory Affairs

Hazard Identification

GHS US classification

Flammable liquid, Category 4 — H227 Combustible liquid.

Skin sensitization, Category 1 — H317 May cause an allergic skin reaction.

GHS Label Elements

Signal word (GHS US): WARNING

Hazard statements (GHS US):

H227 – Combustible liquid.

H317 – May cause an allergic skin reaction.

Precautionary statements

P210 – Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P261 – Avoid breathing dust, fume, gas, mist, vapors, spray.

P272 – Contaminated work clothing must not be allowed out of the workplace.

P280 – Wear protective gloves.

P302+P352 – IF ON SKIN: Wash with plenty of water.

P321 – Specific treatment (see supplemental first aid instruction on this label).

P333+P313 – If skin irritation or rash occurs: Get medical advice or attention.

P362+P364 – Take off contaminated clothing and wash it before reuse.

P370+P378 – In case of fire: Use appropriate media to extinguish.

P403 – Store in a well-ventilated place.

P501 – Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

GHS US labeling

Hazard pictograms (GHS US)



Composition/Information on ingredients

Substances

Not applicable

Mixtures

Name	Product identifier	%	GHS US classification
ALPHA PINENE	CAS-No. 80-56-8	1-5	Flam. Liq. 3, H226; Acute Tox. 4 (Oral), H302; Skin Irrit. 2, H315; Skin Sens. 1B, H317; Asp. Tox. 1, H304
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone (Iso E)	CAS-No. 54464-57-2	1-5	Skin Irrit. 2, H315; Skin Sens. 1B, H317
DIETHYL MALONATE	CAS-No. 105-53-3	1-5	Flam. Liq. 4, H227; Eye Irrit. 2A, H319
Amylcyclohexyl acetate (mixed isomers)	CAS-No. 67874-72-0	1-5	Eye Irrit. 2B, H320
BENZYL BENZOATE	CAS-No. 120-51-4	1-5	Acute Tox. 4 (Oral), H302
3,3-Dimethyl-2-methylenenorcamphane	CAS-No. 79-92-5	1-5	Flam. Sol. 2, H228; Eye Irrit. 2B, H320
alpha-Cedrene	CAS-No. 469-61-4	1-5	Skin Irrit. 2, H315; Asp. Tox. 1, H304
delta-3-Carene	CAS-No. 13466-78-9	0.1-1	Flam. Liq. 3, H226; Acute Tox. 4 (Inhalation), H332; Acute Tox. 4 (Inhalation:dust,mist), H332; Skin Irrit. 2, H315; Skin Sens. 1, H317; Asp. Tox. 1, H304
CINNAMAL	CAS-No. 104-55-2	0.1-1	Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1A, H317

SECTION 4

First-aid measures

Description of first aid measures

First-aid measures general: Call a poison center/doctor/physician if you feel unwell.

First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion: Rinse mouth. Call a poison center/doctor/physician if you feel unwell.

Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation: None under normal conditions.

Symptoms/effects after skin contact: May cause an allergic skin reaction.

Symptoms/effects after eye contact: Eye irritation.

Symptoms/effects after ingestion: Harmful if swallowed.

Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5

Fire-Fighting measures

Suitable (and unsuitable extinguishing media

Suitable extinguishing media :Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media: Do not use a heavy water stream.

Specific Hazards

Fire Hazard: Combustible liquid.

Explosion Hazard: No direct explosion hazard

Special protective equipment and precautions for fire-fighters

Firefighting instructions

Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.

Protection during firefighting

Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus.

Complete protective clothing.

Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures

Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

For Non-Emergency Personnel

Protective Equipment

Wear recommended personal protective equipment.

Emergency Procedures

Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.

For Emergency Responders

Protective Equipment

Do not attempt to take action without suitable protective equipment. For further information refer to Section 8: Exposure Controls/Personal Protection.

Emergency Procedures

Evacuate unnecessary personnel. Stop leak if safe to do so.

Environmental Precautions

Avoid release to the environment. Prevent entry into drains, surface waters, groundwater, and soil.

Methods and Material for Containment and Cleaning Up

Absorb spilled material with sand, earth, vermiculite, or other inert absorbent material. Collect and place in suitable containers for disposal. Dispose of in accordance with local, state, and federal regulations.

Handling and Storage

Precautions for Safe Handling

Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.

Hygiene measures

Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

Specific end use(s)

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

Conditions for Safe Storage, Including Any Incompatibilities

Technical measures: : Keep in a cool, well-ventilated place away from heat.

Storage conditions: : Store in a well-ventilated place. Keep cool.

Packaging materials: Always store product in container of same material as original container.

Exposure Controls

Control Parameters

ALPHA PINENE (80-56-8)

Not applicable

alpha-Cedrene (469-61-4)

Not applicable

BENZYL BENZOATE (120-51-4)

Not applicable

CINNAMAL (104-55-2)

Not applicable

Amylcyclohexyl acetate (mixed isomers) (67874-72-0)

Not applicable

DIETHYL MALONATE (105-53-3)

Not applicable

3,3-Dimethyl-2-methylenenorcamphane (79-92-5)

Not applicable

delta-3-Carene (13466-78-9)

Not applicable

1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone (Iso E Super) (54464-57-2)

Not applicable

Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Environmental exposure controls:

Avoid release to the environment.

8.3 Individual protection measures/Personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:

Protective gloves.

Eye protection:

Safety glasses.

Skin and body protection:

Wear suitable protective clothing.

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment.

Personal protective equipment symbol(s):

Gloves · Safety glasses · Protective clothing

Physical and Chemical Properties

Property	Value
Physical state	Liquid
Color	No data available
Odor	No data available
Odor threshold	No data available
pH	No data available
Melting point	Not applicable
Freezing point	No data available
Boiling point	No data available
Flash point	≈ 154.2°F.
Relative evaporation rate (butyl acetate=1)	No data available
Flammability	Not applicable
Vapor pressure	No data available
Relative vapor density at 20°C	No data available
Relative density	No data available
Solubility	No data available
Partition coefficient n-octanol/water (Log Pow)	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
Explosion limits	No data available
Explosive properties	No data available
Oxidizing properties	No data available

Section 10

Stability and Reactivity

Reactivity

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

Chemical Stability

Stable under normal conditions of storage and handling.

Possibility of Hazardous Reactions

Not expected under normal conditions of use.

Conditions to Avoid

None under recommended storage and handling conditions (see section 7).

Incompatible Materials

No additional information available

Hazardous Decomposition Products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Toxicological Information

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

ALPHA PINENE (80-56-8)

LD50 oral rat: 3700 mg/kg (Rat, Male, Weight of evidence, Oral)
LD50 dermal rabbit: > 5000 mg/kg (24 h, Rabbit, Weight of evidence, Dermal)
ATE US (oral): 500 mg/kg body weight

BENZYL BENZOATE (120-51-4)

LD50 oral rat: > 2000 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male/female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit: > 2 ml/kg (Modification of Draize 1959 method, 4 h, Rabbit, Experimental value, Dermal)
ATE US (oral): 1160 mg/kg body weight

DIETHYL MALONATE (105-53-3)

LD50 oral rat: 15794 mg/kg (Rat, Oral)
LD50 dermal rabbit: > 16960 mg/kg (Rabbit, Dermal)
ATE US (oral): 15794 mg/kg body weight

delta-3-Carene (13466-78-9)

ATE US (oral): 4800 mg/kg body weight
ATE US (gases): 4500 ppmV/4h
ATE US (vapors): 11 mg/L/4h
ATE US (dust, mist): 1.5 mg/L/4h

Remaining toxicological classifications

Skin corrosion/irritation: No data available
Serious eye damage/irritation: No data available
Respiratory or skin sensitization: May cause an allergic skin reaction.
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

Ecological Information

Ecology – general:

The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

BENZYL BENZOATE (120-51-4)

LC50 – Fish [1]: 2.32 mg/L (EU Method C.1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP)
EC50 – Crustacea [1]: 3.09 mg/L (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)

DIETHYL MALONATE (105-53-3)

LC50 – Fish [1]: 111.8 mg/L (96 h, Pimephales promelas)
EC50 – Crustacea [1]: 202.3 mg/L (48 h, Daphnia magna, Static system)

Persistence and degradability

ALPHA PINENE (80-56-8)

Persistence and degradability: Readily biodegradable in water.

BENZYL BENZOATE (120-51-4)

Persistence and degradability: Readily biodegradable in water.

DIETHYL MALONATE (105-53-3)

Persistence and degradability: Readily biodegradable in water.

Bioaccumulative potential

ALPHA PINENE (80-56-8)

BCF – Fish [1]: 718 (Pimephales promelas, QSAR)
Partition coefficient n-octanol/water (Log Pow): 4.487 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Bioaccumulative potential: Potential for bioaccumulation ($500 \leq \text{BCF} \leq 5000$).

BENZYL BENZOATE (120-51-4)

BCF – Fish [1]: 2.286 (BCFBAF v3.00, Pisces, QSAR)
Partition coefficient n-octanol/water (Log Pow): 3.97 (Experimental value, 25 °C)
Bioaccumulative potential: Low potential for bioaccumulation (Log Kow < 4).

DIETHYL MALONATE (105-53-3)

Partition coefficient n-octanol/water (Log Pow): 0.96
Bioaccumulative potential: Low potential for bioaccumulation (Log Kow < 4).

Mobility in soil

ALPHA PINENE (80-56-8)

Ecology – soil: Low potential for adsorption in soil. May be harmful to plant growth, blooming and fruit formation.

BENZYL BENZOATE (120-51-4)

Surface tension: 0.027 N/m (210 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc): 3.8 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value)
Ecology – soil: Low potential for mobility in soil.

DIETHYL MALONATE (105-53-3)

Ecology – soil: May be harmful to plant growth, blooming and fruit formation.

Other adverse effects

No additional information available.

Disposal Considerations

Category	Requirement
Regional waste regulation	Disposal must be done according to official regulations.
Waste treatment methods	Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	Disposal must be done according to official regulations.
Additional information	Do not re-use empty containers.

Transport Information

Department of Transportation (DOT)

In accordance with DOT

Transport document description (DOT)

Not regulated

Other Information

Date: 08/26/2026

Description: Initial release

US Federal Regulations

No additional information available.

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.