
SAFETY DATA SHEET

Version: 1.0

Revision Date:

1. Product and Company Identification:

Product: Coconut Mango Fragrance

Item Code: 99209

Distributor: Shay and Company

2. Hazard Identification:

GHS US classification

Flammable liquids Category 3

Skin corrosion/irritation Category 2

Skin sensitization, Category 1

Reproductive toxicity Category 2

Aspiration hazard Category 1

Flammable liquid and vapor

Causes skin irritation

May cause an allergic skin reaction

Suspected of damaging fertility or the unborn child

May be fatal if swallowed and enters airways

3. Composition/Information on Ingredients:

Ingredient	CAS No	%	GHS US Classification
d-Limonene	5989-27-5	25-50	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304
Gamma-Terpinene	99-85-4	0.1-1	Flam. Liq. 3, H226, Repr. 2, H361, Asp. Tox. 1, H304
Coumarin	91-64-5	5-10%	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Skin Sens. 1B, H317
Ethyl Maltol	4940-11-8	1-5%	Acute Tox. 4 (Oral), H302
Piperonal	120-57-0	1-5%	Skin Sens. 1B, H317
Gamma Octalactone	104-50-7	1-5%	Skin Irrit. 2, H315

Full text of hazard classes and H-statements : see section 16

4. First Aid Measures:

Inhalation: Remove person to fresh air and keep comfortable for breathing.

Eyes: Rinse eyes with water as a precaution.

Skin: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

Ingestion: Do not induce vomiting. Call a physician immediately.

4.2 Delayed/Important Symptoms:

Skin Contact: Irritation

Ingestion: Risk of lung edema

4.3 Immediate Medical Treatment if Necessary:

Treat symptomatically

5. Fire Fighting Measures:

Suitable Extinguishers: Water spray. Dry powder. Foam. Carbon dioxide.

Specific Hazards: Ingredient is flammable

Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

6. Accidental Release Measures:

Personal Precautions for responders: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

For non-emergency personnel: Ventilate area, no open flames, sparks or smoking. Avoid breathing fumes.

Environmental Precautions: Avoid release into the environment.

Clean Up Procedure: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

7. Handling and Storage:

Handling Precautions: 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. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.

Storage Requirements: Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

8. Exposure Controls/Personal Protection:

Control Parameters:

d-Limonene	No additional information
Gamma-Terpinene	No additional information
Coumarin	No additional information
Ethyl Maltol	No additional information
Piperonal	No additional information
Gamma Octalactone	No additional information

Appropriate Engineering Controls:

- Ensure good ventilation
- Avoid release into the environment

Individual Protection Measures

- Wear protective gloves
- Use safety glasses
- Wear suitable protective clothing
- Wear respiratory protection

9. Physical and Chemical Properties:

Physical state	Liquid
Color	YELLOW
Odor	CHARACTERISTIC, MATCHING RETAINER SAMPLE
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	80 °C
Relative evaporation rate (butyl acetate=1)	No data available
Flammability (solid, gas)	Not applicable.
Vapor pressure	No data available
Relative vapor density at 20 °C	No data available
Relative density	0.915 (0.905 – 0.925)
Solubility	Insoluble.
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
Refractive Index	1.457 (1.447-1.467)

10. Stability and Reactivity:

Reactivity: Flammable

Chemical Stability: Stable under normal conditions

Possible hazardous reactions: No dangerous reactions under normal conditions

Conditions to avoid: Avoid contact with hot surfaces; no heat; no flames; no sparks

Incompatible materials: no data available

Hazardous decomposition products: Under normal conditions, no hazardous decomposition products should be produced

11. Toxicological Information:

Acute toxicity (oral)	Not classified
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified

d-Limonene (5989-27-5)	
LD50 oral rat	>2000 mg/kg body weight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	>5000 mg/kg body weight (Equivalent or similar to OECD 402, 24 h, Rabbit, Read-across, Dermal, 7 day(s))
GAMMA-TERPINENE (99-85-4)	
ATE US (oral)	3850 mg/kg body weight

Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/irritation	Not classified
Respiratory or skin sensitization	May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
d-Limonene (5989-27-5)	
IARC group	3 - Not classifiable
Reproductive toxicity	Suspected of damaging fertility or the unborn child.
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	May be fatal if swallowed and enters airways.
Viscosity, kinematic	No data available
Viscosity, kinematic	No data available
Symptoms/effects after skin contact	Irritation. May cause an allergic skin reaction.
Symptoms/effects after ingestion	Risk of lung edema.
COUMARIN (91-64-5)	
LD50 oral rat	293 mg/kg body weight Animal: rat, Guideline: other:
LD50 dermal rat	293 mg/kg body weight Animal: rat, Guideline: other:
ATE US (oral)	293 mg/kg body weight
ATE US (dermal)	293 mg/kg body weight
ETHYL MALTOL (4940-11-8)	
LD50 oral rat	1220 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Experimental value, Oral)
LD50 dermal rabbit	> 5000 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Remarks on results: no indication of skin irritation up to the relevant limit dose level
ATE US (oral)	1200 mg/kg body weight
PIPERONAL (120-57-0)	
LD50 oral rat	2700 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Remarks on results: other:, 95% CL: 2350 - 3100
LD50 dermal rat	> 5000 mg/kg body weight Animal: rat, Guideline: other:, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Remarks on results: other:
ATE US (oral)	2700 mg/kg body weight
GAMMA OCTALACTONE (104-50-7)	
ATE US (oral)	4400 mg/kg body weight

Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Not classified
Respiratory or skin sensitization	May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified

12. Ecological Information:

Ecology - general	The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
d-Limonene (5989-27-5)	
LC50 - Fish [1]	720 µg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value)
EC50 - Crustacea [1]	0.307 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Semi-static system, Fresh water, Experimental value, GLP)
LC50 - Fish [2]	702 µg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [2]	0.51 mg/l Test organisms (species): Daphnia magna
ErC50 algae	0.32 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
COUMARIN (91-64-5)	
LC50 - Fish [1]	2.94 mg/l Test organisms (species):
EC50 - Crustacea [1]	8012 mg/l Test organisms (species): Daphnia sp.
LC50 - Fish [2]	1324 mg/l Test organisms (species):
NOEC (chronic)	0.5 mg/l Test organisms (species): Duration: '21 d'
NOEC chronic fish	0.191 mg/l Test organisms (species): Duration: '30 d'
ETHYL MALTOL (4940-11-8)	
LC50 - Fish [1]	> 85 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value)
EC50 - Crustacea [1]	27 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)
ErC50 algae	7.2 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
PIPERONAL (120-57-0)	
LC50 - Fish [1]	2.5 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Cyprinus carpio, Static system, Fresh water, Experimental value)
EC50 - Crustacea [1]	52 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)

ErC50 algae	31 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value)
GAMMA OCTALACTONE (104-50-7)	
LC50 - Fish [1]	> 3125 mg/l Test organisms (species): other:
EC50 - Crustacea [1]	70.79 mg/l Test organisms (species): Daphnia magna
EC50 - Crustacea [2]	≈ 3176 mg/l Test organisms (species): Daphnia magna

Persistence and Degradability

d-Limonene (5989-27-5)	
Persistence and degradability	Readily biodegradable in water.
ThOD	3.29 g O ₂ /g substance
ETHYL MALTOL (4940-11-8)	
Persistence and degradability	Readily biodegradable in water.
PIPERONAL (120-57-0)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
ThOD	1.71 g O ₂ /g substance

Bio accumulative Potential

ETHYL MALTOL (4940-11-8)	
Partition coefficient n-octanol/water (Log Pow)	2.9 (Practical experience/observation, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
PIPERONAL (120-57-0)	
Partition coefficient n-octanol/water (Log Pow)	1.2 (Practical experience/observation, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 35 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
d-Limonene (5989-27-5)	
BCF - Fish [1]	864.8 l/kg (BCFBAF v3.01, Pisces, QSAR, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	4.38 (Experimental value, Equivalent or similar to OECD 117, 37 °C)
Bioaccumulative potential	Potential for bioaccumulation (4 ≤ Log Kow ≤ 5).

Motility in Soil

d-Limonene (5989-27-5)	
Surface tension	No data available in the literature
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.049 – 3.801 (log Koc, SRC PCKOCWIN v2.0, Calculated value)

Ecology - soil	Low potential for mobility in soil.
ETHYL MALTOL (4940-11-8)	
Ecology - soil	No (test)data on mobility of the substance available.
PIPERONAL (120-57-0)	
Ecology - soil	No (test)data on mobility of the substance available.

13. Disposal Considerations:

Waste treatment methods	Dispose of contents/container in accordance with licensed collector's sorting instructions.
Additional information	Flammable vapors may accumulate in the container.

14. Transportation Information:

Department of Transportation (DOT)

In accordance with DOT Transport document description (DOT)	UN1266 Perfumery products (Regulated for Bulk only), 3, III
UN-No.(DOT)	UN1266
Proper Shipping Name (DOT)	Perfumery products (Regulated for Bulk only)
Class (DOT)	3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Packing group (DOT)	III - Minor Danger
Hazard labels (DOT)	3 - Flammable liquid



DOT Packaging Non Bulk (49 CFR 173.xxx)	203
DOT Packaging Bulk (49 CFR 173.xxx)	242
DOT Special Provisions (49 CFR 172.102)	B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable. IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in

	Table 2 for UN2672). T2 - 1.5 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
DOT Packaging Exceptions (49 CFR 173.xxx)	150
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	220 L
DOT Vessel Stowage Location	A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
Emergency Response Guide (ERG) Number	127
Other information	No supplementary information available.

Transportation of Dangerous Goods Transport document description (TDG)	UN1266 PERFUMERY PRODUCTS (Regulated for Bulk only), 3, III
UN-No. (TDG)	UN1266
Proper Shipping Name (TDG)	PERFUMERY PRODUCTS
TDG Primary Hazard Classes	3 - Class 3 - Flammable Liquids
Packing group (TDG)	III - Minor Danger
TDG Special Provisions	59 - Substances that are listed by name in Schedule 1 must not be transported under this shipping name. Substances transported under this shipping name may contain not more than 20% nitrocellulose if the nitrocellulose contains not more than 12.6% nitrogen (by dry mass).
Explosive Limit and Limited Quantity Index	5 L
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index	60 L



Shay and Company
 10639 SE Fuller Rd
 Milwaukie, OR 97222
 Ph: 503-653-1155
 info@shayandcompany.com

Transport by sea Transport document description (IMDG)	UN 1266 PERFUMERY PRODUCTS, 3, III
UN-No. (IMDG)	1266
Proper Shipping Name (IMDG)	PERFUMERY PRODUCTS
Class (IMDG)	3 - Flammable liquids
Packing group (IMDG)	III - substances presenting low danger
Limited quantities (IMDG)	5 L
Air transport Transport document description (IATA)	UN 1266 Perfumery products, 3, III
UN-No. (IATA)	1266
Proper Shipping Name (IATA)	Perfumery products
Class (IATA)	3 - Flammable Liquids
Packing group (IATA)	III - Minor Danger

15. Regulatory Information:

US Federal Regulations

COUMARIN (91-64-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
GAMMA OCTALACTONE (104-50-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Canada Regulations

d-Limonene (5989-27-5)
Listed on the Canadian DSL (Domestic Substances List)
GAMMA-TERPINENE (99-85-4)
Listed on the Canadian DSL (Domestic Substances List)
COUMARIN (91-64-5)
Listed on the Canadian DSL (Domestic Substances List)
ETHYL MALTOL (4940-11-8)
Listed on the Canadian DSL (Domestic Substances List)
PIPERONAL (120-57-0)
Listed on the Canadian DSL (Domestic Substances List)



Shay and Company
10639 SE Fuller Rd
Milwaukie, OR 97222
Ph: 503-653-1155
info@shayandcompany.com

GAMMA OCTALACTONE (104-50-7)

Listed on the Canadian DSL (Domestic Substances List)

EU Regulations

No additional Information

National Regulations

d-Limonene (5989-27-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on INSQ (Mexican National Inventory of Chemical Substances)

GAMMA-TERPINENE (99-85-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on INSQ (Mexican National Inventory of Chemical Substances)

ETHYL MALTOL (4940-11-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on INSQ (Mexican National Inventory of Chemical Substances)

PIPERONAL (120-57-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on INSQ (Mexican National Inventory of Chemical Substances)

US Regulations

This product can expose you to furocoumarines (e. g. trioxysalen (inn), 8-methoxypsoralen, 5-methoxypsoralen) except for normal content in natural essences used. in sunprotection and in bronzing products, furocoumarines shall be below 1 mg/kg, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

This product can expose you to myrcene, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

16. Other Information:

Full text of H phrases

- H226- Flammable liquid and vapor
- H301- Toxic if swallowed
- H302- Harmful if swallowed
- H304- May be fatal if swallowed and enters airway
- H311- Toxic in contact with skin
- H315- Causes skin irritation
- H317- May cause allergic skin reaction
- H361- Suspected of damaging fertility to unborn child



Shay and Company
10639 SE Fuller Rd
Milwaukie, OR 97222
Ph: 503-653-1155
info@shayandcompany.com

The information provided above is intended only as a guide to the appropriate precautionary handling of the item. It is the responsibility of the customer and user to ensure it has in place provisions for the safe and proper handling of the material. Shay and Company believes the above information to be accurate based on the information available, however, it is the responsibility of the customer and user of the material to perform its own investigation and due diligence prior to use to verify that the product purchased from Shay and Company meets their quality requirements and is appropriate for the use to which the product is to be put.