



Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 08/03/2018

Reviewed on 08/03/2018

1 Identification

- **Product Identifier**
- **Trade Name:** FL-144 Vanilla Mint Flavor Concentrate
- **Product Number:** FL-144
- **Relevant identified uses of the substance or mixture and uses advised against:**
- **Product Description:** Flavors for the food and beverage industry
- **Details of the Supplier of the Safety Data Sheet:**
- **Manufacturer/Supplier:**
Liquid Barn, LLC
2265 Ward Ave. Ste. C
Simi Valley, Ca 93065
(818) 584-7201
WWW.LIQUIDBARN.COM
- **Emergency telephone number:**
ChemTel Inc. Contract Number MIS0073616
USA 1-(800)-255-3924, Outside US Territories and Canada +1-(813)-248-0585

2 Hazard(s) Identification

- **Classification of the substance or mixture:**



Skin Sens. 1 H317 May cause an allergic skin reaction.

Flam. Liq. 4 H227 Combustible liquid.

- **Label elements:**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**



GHS07

- **Signal word:** Warning
- **Hazard-determining components of labeling:**
l-carvone
- **Hazard statements:**
H227 Combustible liquid.
H317 May cause an allergic skin reaction.
- **Precautionary statements:**
P210 Keep away from flames and hot surfaces. – 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/protective clothing/eye protection/face protection.
P302+P352 If on skin: Wash with plenty of water.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P321 Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).
P363 Wash contaminated clothing before reuse.
P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
P403+P235 Store in a well-ventilated place. Keep cool.

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P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Unknown acute toxicity:

This value refers to knowledge of known, established toxicological or ecotoxicological values.

0 % of the mixture consists of component(s) of unknown toxicity.

Classification system: NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme**NFPA ratings (scale 0 - 4)**

Health = 0

Fire = 2

Reactivity = 0

HMIS-ratings (scale 0 - 4)

HEALTH	0	Health = 0
FIRE	2	Fire = 2
REACTIVITY	0	Physical Hazard = 0

Hazard(s) not otherwise classified (HNOC): None known

3 Composition/Information on Ingredients

Chemical characterization: Mixtures**Description:** Mixture of substances listed below with non-hazardous additions.**Dangerous Components:**

CAS: 57-55-6 RTECS: TY 2000000	Propylene Glycol	70-90%
CAS: 6485-40-1 RTECS: OS 8650000	l-carvone ⚠ Skin Sens. 1, H317	2-12%
CAS: 56-81-5 RTECS: MA 8050000	Glycerol	2-12%
CAS: 121-33-5 RTECS: YW 5775000	Vanillin ⚠ Acute Tox. 4, H302; Eye Irrit. 2A, H319	2-12%
CAS: 4940-11-8 RTECS: UQ0840000	Ethyl maltol ⚠ Acute Tox. 4, H302	2-12%
CAS: 121-32-4 RTECS: CU 6125000	Ethyl vanillin ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335; Aquatic Chronic 3, H412	2-12%

Additional information:

The exact percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions of paragraph (i) of §1910.1200 of 29 CFR 1910.1200 Trade Secrets.

4 First-Aid Measures

Description of first aid measures**General information:**

Symptoms of poisoning may occur after exposure to dust, fumes or particulates; seek medical attention if feeling unwell.

After inhalation: In case of unconsciousness place patient stably in side position for transportation.**After skin contact:**

If skin irritation occurs, consult a doctor.

Wash with soap and water.

After eye contact:

If eye irritation occurs, consult a doctor.

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- Rinse opened eye for several minutes under running water.
- **After swallowing:** If swallowed and symptoms occur, consult a doctor.
 - **Information for doctor**
 - **Most important symptoms and effects, both acute and delayed:** No further relevant information available.
 - **Indication of any immediate medical attention and special treatment needed:**
No further relevant information available.

5 Fire-Fighting Measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture:**
Combustible liquid. Vapors can travel to a source of ignition and flash back.
Explosive mixtures may occur at temperatures at or above flashpoint.
- **Advice for firefighters**
- **Special protective equipment for firefighters:**
Mouth respiratory protective device.
As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures:** Not required.
- **Environmental precautions:** Do not allow to enter sewers/surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
Dispose of the collected material according to regulations.
- **Reference to other sections:**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

· PAC-1:

57-55-6	Propylene Glycol	30 mg/m ³
56-81-5	Glycerol	45 mg/m ³
64-17-5	Ethanol	1,800 ppm

· PAC-2:

57-55-6	Propylene Glycol	1,300 mg/m ³
56-81-5	Glycerol	180 mg/m ³
64-17-5	Ethanol	3300* ppm

· PAC-3:

57-55-6	Propylene Glycol	7,900 mg/m ³
56-81-5	Glycerol	1,100 mg/m ³
64-17-5	Ethanol	15000* ppm

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7 Handling and Storage

- **Handling**
- **Precautions for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s):** No further relevant information available.

8 Exposure Controls/Personal Protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters:**
- **Components with occupational exposure limits:**
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the other constituents have no known exposure limits.

57-55-6 Propylene Glycol	
WEEL	Long-term value: 10 mg/m ³
56-81-5 Glycerol	
PEL	Long-term value: 15* 5** mg/m ³ mist; *total dust **respirable fraction
TLV	TLV withdrawn-insufficient data human occup. exp.
121-33-5 Vanillin	
TWA	Long-term value: 10 mg/m ³
WEEL	Long-term value: 10 mg/m ³

- **Additional information:** The lists that were valid during the creation of this SDS were used as basis.
- **Exposure controls:**
- **Personal protective equipment**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing and wash before reuse.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Breathing equipment:** Not required.
- **Protection of hands:**



Protective gloves

- **Material of gloves:**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

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Trade Name: FL-144 Vanilla Mint Flavor Concentrate**· Penetration time of glove material:**

The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

· Eye protection:

Goggles recommended during refilling.

9 Physical and Chemical Properties

· Information on basic physical and chemical properties**· General Information****· Appearance:**

Form:	Liquid
Color:	Light yellow
Odour:	Characteristic
Odor threshold:	Not determined.
pH-value:	Not applicable.

· Change in condition

Melting point/Melting range:	Not determined.
Boiling point/Boiling range:	≥78 °C (≥172.4 °F)

Flash point:	≥61.1 °C (≥142 °F)
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Flammability (solid, gaseous):	Not applicable.
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Ignition temperature:	≥371 °C (≥699.8 °F)
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Decomposition temperature:	Not determined.
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Auto igniting:	Product is not self-igniting.
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Danger of explosion:	Not determined.
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· Explosion limits:

Lower:	≥2.6 Vol %
Upper:	≤12.6 Vol %

Vapor pressure @ 20 °C(68 °F):	≤0.1 hPa (≤0.1 mm Hg)
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Density @ 20 °C(68 °F):	1.0485 g/cm ³ (8.7497 lbs/gal)
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Relative density:	Not determined.
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Vapor density:	Not determined.
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Evaporation rate:	Not determined.
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· Solubility in / Miscibility with:

Water:	Not miscible or difficult to mix.
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Partition coefficient (n-octanol/water):	Not determined.
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· Viscosity:

Dynamic:	Not determined.
Kinematic:	Not determined.

· Solvent content:

Organic solvents:	4.1 %
Water:	5.2 %

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Trade Name: FL-144 Vanilla Mint Flavor Concentrate**VOC content:** 0.46 %**Solids content:** 8.2 %**Other information:** No further relevant information available.

10 Stability and Reactivity

- **Reactivity:** No further relevant information available.
- **Chemical stability:** Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** Heat, flame and ignition sources.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological Information

- **Information on toxicological effects:**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

57-55-6 Propylene Glycol

Oral	LD50	20,000 mg/kg (Rat)
Dermal	LD50	20,800 mg/kg (Rabbit)
Inhalative	LC50/96 hours	52,930 mg/l (Pimephales)
	Intravenous	6,630 mg/kg (Mouse)
		6,423 mg/kg (Rat)
		6,500 mg/kg (Rabbit)

6485-40-1 l-carvone

Oral	LD50	1,640 mg/kg (Rat)
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56-81-5 Glycerol

Oral	LD50	12,600 mg/kg (Rat)
Dermal	LD50	>10,000 mg/kg (Rabbit)
Inhalative	LC50/96 hours	>50,000 mg/l (Trout)

121-33-5 Vanillin

Oral	LD50	1,580 mg/kg (Rat)
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4940-11-8 Ethyl maltol

Oral	LD50	780 mg/kg (Mouse)
		1,150 mg/kg (Rat)
Dermal	LD50	>5,000 mg/kg (Rabbit)

121-32-4 Ethyl vanillin

Oral	LD50	1,590 mg/kg (Rat)
Dermal	LD50	>7,940 mg/kg (Rabbit)
Inhalative	LC50/96 hours	87.6 mg/l (Pimephales)

- **Primary irritant effect:**
- **On the skin:**
Irritant to skin and mucous membranes.
May cause an allergic skin reaction.
- **On the eye:** No irritating effect.
- **Sensitization:** Sensitization possible through skin contact.

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Trade Name: FL-144 Vanilla Mint Flavor Concentrate**Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

Carcinogenic categories:**IARC (International Agency for Research on Cancer):**

The IARC (the International Agency for Research on Cancer) concluded that ethanol found alcoholic beverages to be Group 1 - Carcinogenic to humans. All other instances it is not consider carcinogenic.

Group 1 - Carcinogenic to humans

Group 2A - Probably carcinogenic to humans

Group 2B - Possibly carcinogenic to humans

Group 3 - Not classifiable as to its carcinogenicity to humans

Group 4 - Probably not carcinogenic to humans

64-17-5 Ethanol

1

NTP (National Toxicology Program):

None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

12 Ecological Information

Toxicity:**Aquatic toxicity:**

57-55-6 Propylene Glycol

EC50 >10,000 mg/l (Daphnia)

Persistence and degradability: No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

Additional ecological information:

General notes:

Do not allow undiluted product or product that has not been neutralized to reach ground water, water course or sewage system.

Results of PBT and vPvB assessment:

PBT: Not applicable.

vPvB: Not applicable.

Other adverse effects: No further relevant information available.

13 Disposal Considerations

Waste treatment methods

Recommendation:

Observe all federal, state and local environmental regulations when disposing of this material.

Uncleaned packaging

Recommendation: Disposal must be made according to official regulations.

14 Transport Information

UN-Number:

DOT, ADR/ADN, IMDG, IATA

Non-Regulated Material

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Trade Name: FL-144 Vanilla Mint Flavor Concentrate

- **UN proper shipping name:**
- **DOT, ADR/ADN, IMDG, IATA** Non-Regulated Material
- **Transport hazard class(es):**
- **DOT, ADR/ADN, IMDG, IATA**
- **Class:** Non-Regulated Material
- **Packing group:**
- **DOT, ADR/ADN, IMDG, IATA** Non-Regulated Material
- **Environmental hazards:** Not applicable.
- **Special precautions for user:** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.
- **UN "Model Regulation":** Non-Regulated Material

15 Regulatory Information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
- **SARA (Superfund Amendments and Reauthorization):**

- **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

- **Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

- **TSCA (Toxic Substances Control Act):**

All ingredients are listed or exempt from listing.

- **California Proposition 65:**

- **Chemicals known to cause cancer:**

None of the ingredients are listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

- **Chemicals known to cause developmental toxicity:**

64-17-5 Ethanol

- **New Jersey Right-to-Know List:**

57-55-6 Propylene Glycol

56-81-5 Glycerol

64-17-5 Ethanol

- **New Jersey Special Hazardous Substance List:**

64-17-5 Ethanol

CA, MU, TE, F3

- **Pennsylvania Right-to-Know List:**

57-55-6 Propylene Glycol

56-81-5 Glycerol

64-17-5 Ethanol

- **Pennsylvania Special Hazardous Substance List:**

None of the ingredients are listed.

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Trade Name: FL-144 Vanilla Mint Flavor Concentrate**· Carcinogenic categories:****· EPA (Environmental Protection Agency):**

None of the ingredients are listed.

· TLV (Threshold Limit Value established by ACGIH):

64-17-5 Ethanol

A3

· NIOSH-Ca (National Institute for Occupational Safety and Health):

None of the ingredients are listed.

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms:

GHS07

· Signal word: Warning**· Hazard-determining components of labeling:**

l-carvone

· Hazard statements:

H227 Combustible liquid.

H317 May cause an allergic skin reaction.

· Precautionary statements:

P210 Keep away from flames and hot surfaces. – 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/protective clothing/eye protection/face protection.

P302+P352 If on skin: Wash with plenty of water.

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

P321 Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).

P363 Wash contaminated clothing before reuse.

P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· National regulations:

None of the ingredients are listed.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

· Date of preparation / last revision: 08/03/2018 / -**· Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety and Health
OSHA: Occupational Safety & Health Administration
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Flam. Liq. 4: Flammable liquids – Category 4
Acute Tox. 4: Acute toxicity – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
Skin Sens. 1: Skin sensitisation – Category 1
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· *** Data compared to the previous version altered.**

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