



**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention

Specific treatment (see .? on this label)

IF IN EYES: 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

IF ON SKIN: Wash with plenty of soap and water

If skin irritation or rash occurs: Get medical advice/attention

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

**Other information**

- Toxic to aquatic life

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS-No	Weight %	Trade Secret
ETHYL ALCOHOL	64-17-5	30-50%	*
GLYCERINE	56-81-5	30-50%	*
BENZYL ALCOHOL	100-51-6	1-5%	*
2-Butanone, 4-(4-hydroxyphenyl)-	5471-51-2	1-5%	*
CITRIC ACID	77-92-9	1-5%	*
BENZYL ALCOHOL	100-51-6	1-5%	*
METHYLCYCLOPENTENOLONE	80-71-7	1-5%	*
VANILLIN	121-33-5	<1	*
ACETALDEHYDE	75-07-0	<1	*

**4. FIRST AID MEASURES**

**First aid measures for different exposure routes**

<b>General advice</b>	Immediate medical attention is required. Show this material safety data sheet to the doctor in attendance.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin contact</b>	Wash off immediately with plenty of water.
<b>Inhalation</b>	Move to fresh air.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water.
<b>Self-protection of the first aider</b>	Remove all sources of ignition.

**Most important symptoms/effects, acute and delayed**

**Main Symptoms** Hives.

**Indication of immediate medical attention and special treatment needed, if necessary**

**Note to physicians** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

### **Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

### **Unsuitable extinguishing media**

Decomposition by contact with water may generate vapors which can be ignited by heat or open flame.

### **Specific hazards arising from the chemical**

No information available.

### **Explosion data**

**Sensitivity to Mechanical Impact** none.

**Sensitivity to Static Discharge** Yes.

### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

### **Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation.

### **Environmental precautions**

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

### **Methods and materials for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

### **Precautions for safe handling**

**Advice on safe handling** Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use only in an area containing flame proof equipment. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.

### **Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep tightly closed in a dry and cool place. Keep in properly labeled containers.

**Incompatible products** None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure Guidelines**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

<b>Chemical Name</b>	<b>ACGIH TLV</b>	<b>OSHA PEL</b>	<b>NIOSH IDLH</b>
ETHYL ALCOHOL 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup> (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m <sup>3</sup>	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>
GLYCERINE 56-81-5	-	TWA: 15 mg/m <sup>3</sup> mist, total particulate TWA: 5 mg/m <sup>3</sup> mist, respirable fraction (vacated) TWA: 10 mg/m <sup>3</sup> mist, total particulate (vacated) TWA: 5 mg/m <sup>3</sup> mist, respirable fraction	
ETHYL ACETATE 141-78-6	TWA: 400 ppm	TWA: 400 ppm TWA: 1400 mg/m <sup>3</sup> (vacated) TWA: 400 ppm (vacated) TWA: 1400 mg/m <sup>3</sup>	IDLH: 2000 ppm TWA: 400 ppm TWA: 1400 mg/m <sup>3</sup>
ISOAMYL ALCOHOL 123-51-3	STEL: 125 ppm TWA: 100 ppm	TWA: 100 ppm TWA: 360 mg/m <sup>3</sup> (vacated) TWA: 100 ppm (vacated) TWA: 360 mg/m <sup>3</sup> (vacated) STEL: 125 ppm (vacated) STEL: 450 mg/m <sup>3</sup>	IDLH: 500 ppm TWA: 100 ppm TWA: 360 mg/m <sup>3</sup> STEL: 125 ppm STEL: 450 mg/m <sup>3</sup>
ACETALDEHYDE 75-07-0	Ceiling: 25 ppm	TWA: 200 ppm TWA: 360 mg/m <sup>3</sup> (vacated) TWA: 100 ppm (vacated) TWA: 180 mg/m <sup>3</sup> (vacated) STEL: 150 ppm (vacated) STEL: 270 mg/m <sup>3</sup>	IDLH: 2000 ppm
ISOAMYL ACETATE 123-92-2	STEL: 100 ppm TWA: 50 ppm	TWA: 100 ppm TWA: 525 mg/m <sup>3</sup> (vacated) TWA: 100 ppm (vacated) TWA: 525 mg/m <sup>3</sup>	IDLH: 1000 ppm TWA: 100 ppm TWA: 525 mg/m <sup>3</sup>
DIMETHYL SULFIDE 75-18-3	TWA: 10 ppm	-	
ACETOPHENONE 98-86-2	TWA: 10 ppm	-	
CITRAL 5392-40-5	TWA: 5 ppm inhalable fraction and vapor S*	-	
PINENES 80-56-8	TWA: 20 ppm	-	

*NIOSH IDLH: Immediately Dangerous to Life or Health*

**Other Exposure Guidelines**

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Exposure controls**

**Engineering Controls**

Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

If splashes are likely to occur, wear:.

**Skin and body protection**

Chemical resistant apron.

**Respiratory protection**

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Physical and chemical properties

**Physical state** liquid  
**Appearance** clear  
**Odor** blackberry with cooked spicy notes  
**Color** light yellow

<u>Property</u>	<u>Values</u>	<u>Method</u>
<b>pH</b>		No information available
<b>Melting/freezing point</b>		FCC Method
<b>Boiling point/boiling range</b>		FCC Method
<b>Flash Point</b>	21 °C / 69 °F	Closed cup
<b>Evaporation rate</b>	No information available	No information available
<b>Flammability (solid, gas)</b>	No information available	No information available
<b>Flammability Limits in Air</b>		No information available
<b>Upper flammability limit</b>	No information available	
<b>lower flammability limit</b>	No information available	
<b>Vapor pressure mm Hg 20°C</b>		No information available
<b>Vapor density</b>		No information available
<b>Specific Gravity @ 25C</b>		FCC Method
0.9896 - 1.0196		
<b>Specific Gravity @ 20C</b>	0.9926 - 1.0226	FCC Method
<b>Refractive Index</b>	1.4040 - 1.4340	FCC Method
<b>Water solubility</b>	Practically insoluble	
<b>Solubility in other solvents</b>		No information available
<b>Partition coefficient: n-octanol/water</b>		No information available
<b>Autoignition temperature</b>	No information available	No information available
<b>Decomposition temperature</b>		No information available
<b>Viscosity, kinematic</b>	No information available	No information available
<b>Viscosity, dynamic</b>	No information available	
<b>Explosive properties</b>	No information available	
<b>Oxidizing Properties</b>	No information available	

### Other information

**Softening point** No information available  
**Molecular Weight** No information available  
**VOC Content(%)** No information available  
**Density VALUE** No information available  
**Bulk Density VALUE** No information available

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

None under normal processing.

### Conditions to Avoid

Heat, flames and sparks.

**Incompatible Materials**

None known based on information supplied.

**Hazardous Decomposition Products**

None known based on information supplied.

**11. TOXICOLOGICAL INFORMATION**

Information on likely routes of exposure

<b>Product Information</b>	Product does not present an acute toxicity hazard based on known information
<b>Inhalation</b>	There is no data available for this product.
<b>Eye contact</b>	There is no data available for this product.
<b>Skin contact</b>	There is no data available for this product.
<b>Ingestion</b>	There is no data available for this product.

Chemical Name	Oral LD50	Dermal LD50	LC50 Inhalation
ETHYL ALCOHOL 64-17-5	7060 mg/kg ( Rat )	-	124.7 mg/L ( Rat ) 4 h
GLYCERINE 56-81-5	-	10 g/kg ( Rabbit )	570 mg/m <sup>3</sup> ( Rat ) 1 h
BENZYL ALCOHOL 100-51-6	1230 mg/kg ( Rat )	2000 mg/kg ( Rabbit )	8.8 mg/L ( Rat ) 4 h
CITRIC ACID 77-92-9	3000 mg/kg ( Rat )	-	-
BENZYL ALCOHOL 100-51-6	1230 mg/kg ( Rat )	2000 mg/kg ( Rabbit )	8.8 mg/L ( Rat ) 4 h
ACETALDEHYDE 75-07-0	1930 mg/kg ( Rat )	-	-

Information on toxicological effects

**Symptoms** No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization** No information available.  
**Germ Cell Mutagenicity** No information available.  
**Carcinogenicity** This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

Chemical Name	ACGIH	IARC	NTP	OSHA
ETHYL ALCOHOL 64-17-5	A3	Group 1	Known	X
ACETALDEHYDE 75-07-0	A3	Group 1 Group 2B	Reasonably Anticipated	X

ACGIH (American Conference of Governmental Industrial Hygienists)  
A3 - Animal Carcinogen  
IARC (International Agency for Research on Cancer)  
Group 1 - Carcinogenic to Humans  
Group 2B - Possibly Carcinogenic to Humans  
NTP (National Toxicology Program)  
Known - Known Carcinogen  
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen  
OSHA (Occupational Safety and Health Administration of the US Department of Labor)  
X - Present

**Reproductive toxicity** No information available.

**Specific target organ systemic toxicity (single exposure)** No information available.  
**Specific target organ systemic toxicity (repeated exposure)** No information available.  
**Chronic toxicity** May cause adverse liver effects. Contains a known or suspected reproductive toxin.  
**Target Organ Effects** Blood, Central nervous system, Eyes, Kidney, Liver, Reproductive system, Respiratory system, Skin.  
**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document  
. mg/kg mg/l

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Toxic to aquatic life

1.35698% of the mixture consists of component(s) of unknown hazards to the aquatic environment

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

Chemical Name	log Pow
ETHYL ALCOHOL 64-17-5	-0.32
GLYCERINE 56-81-5	-1.76
BENZYL ALCOHOL 100-51-6	1.1
CITRIC ACID 77-92-9	-1.72
BENZYL ALCOHOL 100-51-6	1.1
VANILLIN 121-33-5	1.23
ACETALDEHYDE 75-07-0	0.5

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment**

**Waste Disposal Methods** It must undergo special treatment, e.g. at suitable disposal site, to comply with local regulations.

**Contaminated packaging** Do not reuse container.

**US EPA Waste Number** D001 U112 U001 U004

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
ETHYL ALCOHOL 64-17-5	Toxic Ignitable
ACETALDEHYDE 75-07-0	Toxic Ignitable

#### 14. TRANSPORT INFORMATION

##### DOT/ADR

UN/ID No 1197  
 Proper shipping name EXTRACTS, FLAVOURING, LIQUID  
 Hazard class 3  
 Packing Group II  
 ERG Code 127

##### ICAO/IATA

UN/ID No 1197  
 Proper shipping name EXTRACTS, FLAVOURING, LIQUID  
 Hazard class 3  
 Packing Group II  
 ERG Code 127

##### IMDG / IMO

UN/ID No 1197  
 Proper shipping name EXTRACTS, FLAVOURING, LIQUID  
 Hazard class 3  
 Packing Group II

#### 15. REGULATORY INFORMATION

##### International Inventories

TSCA -  
 DSL/NDSL -  
 EINECS/ELINCS -  
 ENCS -  
 IECSC -  
 KECL -  
 PICCS -  
 AICS -

##### Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

##### U.S. Federal Regulations

##### SARA 313

**370TTB BLACKBERRY COBBLER TYPE, NATURAL & ARTIFICIAL  
(CONTAINS <0.10% ARTIFICIAL TOP NOTE)**

Revision Date 31-Oct-2016

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
ACETALDEHYDE - 75-07-0	75-07-0	0.24	0.1

**SARA 311/312 Hazard Categories**

Acute Health Hazard	no
Chronic Health Hazard	no
Fire Hazard	Yes
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
ACETALDEHYDE 75-07-0	1000 lb			X

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
ACETALDEHYDE 75-07-0	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

**U.S. State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
ETHYL ALCOHOL - 64-17-5	Carcinogen Developmental
ACETALDEHYDE - 75-07-0	Carcinogen
METHYL EUGENOL - 93-15-2	Carcinogen

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
ETHYL ALCOHOL 64-17-5	X	X	X
GLYCERINE 56-81-5	X	X	X
ETHYL BUTYRATE 105-54-4	X	X	X
ETHYL ACETATE 141-78-6	X	X	X
ACETALDEHYDE 75-07-0	X	X	X
METHYL EUGENOL 93-15-2	X		
PINENES 80-56-8	X	X	X

**U.S. EPA Label information**

**16. OTHER INFORMATION**

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<u>NFPA</u>	Health Hazard 2	Flammability 4	Instability 0	Physical and chemical hazards *
<u>HMIS</u>	Health Hazard 2	Flammability 4	Physical Hazard 0	Personal protection b

Revision Date 31-Oct-2016  
Revision Note No information available

Revision# 1

**WARNING/DISCLAIMER:**

Apex Flavors, Inc.'s products are sold exclusively for use in food and drink for human consumption. These products have not been tested, nor have they been deemed safe, for inhalation or use in electronic smoking devices, electronic nicotine delivery systems, and electronic cigarettes or similar devices (collectively "E-Cigarettes"). In supplying this product(s), Apex Flavors, Inc. instructs, and purchasing recipient confirms, that this product(s) will not be used in connection with the manufacture and distribution of E-Cigarettes or any component thereof. Recipients of our products that use them outside of their intended use of food or drink do so at their own risk and without warranty, either expressed or implied, from Apex Flavors, Inc. or its suppliers. The user assumes all liability for loss, injury, damage, or expense resulting from such uses.

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