



**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

**Product identifier**

**Product Code(s)** 341  
**Product name** BLACK RASPBERRY FLAVOR (CHAMBORD TYPE), NATURAL & ARTIFICIAL

**UN/ID No** 1197

**Recommended use of the chemical and restrictions on use**

**Recommended Use** No information available.  
**Uses advised against** No information available

**Manufacturer** Apex Flavors, Inc.  
 1371 Brass Mill Rd.  
 Suite A  
 Belcamp, MD 21017  
 (410) 565-6600

**Emergency telephone**

Chemtrec: 1-800-424-9300 for US/ 703-527-3887 outside US

**2. HAZARDS IDENTIFICATION**

**Classification**

**OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious eye damage/eye irritation	Category 2A
Skin Sensitization	Category 1
Carcinogenicity	Category 2
Flammable liquids	Category 3

**GHS Label elements, including precautionary statements**

**Emergency Overview**

<p><b>Warning</b></p> <p><b>Hazard Statements</b>                  Causes serious eye irritation                  May cause an allergic skin reaction                  Suspected of causing cancer                  Flammable liquid and vapor</p>
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**Appearance** clear**Physical state** liquid**Odor** fruity raspberry**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 skin irritation or rash occurs: Get medical advice/attention

Wash contaminated clothing before reuse

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction**Precautionary Statements - Storage**

Store locked up

Store in a well-ventilated place. Keep cool

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)****Other information**

- Toxic to aquatic life with long lasting effects
- Toxic to aquatic life

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS-No	Weight %	Trade Secret
ETHYL ALCOHOL	64-17-5	20-30%	*
2-Butanone, 4-(4-hydroxyphenyl)-	5471-51-2	1-5%	*
ACETALDEHYDE	75-07-0	<1	*
BENZYL ALCOHOL	100-51-6	<1	*
TRANS-2-HEXENAL	6728-26-3	<1	*

**4. FIRST AID MEASURES****First aid measures for different exposure routes**

<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 skin with soap and water.
<b>Inhalation</b>	Move to fresh air.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water.

**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** Ensure adequate ventilation.

**Environmental precautions**

**Environmental precautions** 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** Pick up and transfer to properly labeled containers.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

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

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

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

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

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

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
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>
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
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 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	-	
ISOBUTYL ACETATE 110-19-0	TWA: 150 ppm	TWA: 150 ppm TWA: 700 mg/m <sup>3</sup> (vacated) TWA: 150 ppm (vacated) TWA: 700 mg/m <sup>3</sup>	IDLH: 1300 ppm TWA: 150 ppm TWA: 700 mg/m <sup>3</sup>
PINENES 80-56-8	TWA: 20 ppm	-	
BENZONITRILE 100-47-0	-	TWA: 5 mg/m <sup>3</sup> CN (vacated) TWA: 5 mg/m <sup>3</sup> S*	IDLH: 25 mg/m <sup>3</sup> CN

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** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Physical and chemical properties

<b>Physical state</b>	liquid
<b>Appearance</b>	clear
<b>Odor</b>	fruity raspberry
<b>Color</b>	Colorless to light yellow.

<u>Property</u>	<u>Values</u>	<u>Method</u>
pH		No information available
Melting/freezing point		FCC Method
Boiling point/boiling range		FCC Method
Flash Point	31 °C / 88 °F	Closed cup
Evaporation rate	No information available	No information available
Flammability (solid, gas)	No information available	No information available
Flammability Limits in Air		No information available
Upper flammability limit	No information available	
lower flammability limit	No information available	
Vapor pressure mm Hg 20°C		No information available
Vapor density		No information available
Specific Gravity @ 25C	0.9402 - 0.9802	FCC Method
Specific Gravity @ 20C	0.9432 - 0.9832	FCC Method
Refractive Index	1.2125 - 1.6125	FCC Method
Water solubility	Practically insoluble	
Solubility in other solvents		No information available
Partition coefficient: n-octanol/water		No information available
Autoignition temperature	No information available	No information available
Decomposition temperature		No information available
Viscosity, kinematic	No information available	No information available
Viscosity, dynamic	No information available	
Explosive properties	No information available	
Oxidizing Properties	No information available	

### Other information

<b>Softening point</b>	No information available
<b>Molecular Weight</b>	No information available
<b>VOC Content(%)</b>	No information available
<b>Density VALUE</b>	No information available
<b>Bulk Density VALUE</b>	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

Extremes of temperature and direct sunlight.

### 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
PROPYLENE GLYCOL 57-55-6	20000 mg/kg ( Rat )	20800 mg/kg ( Rabbit )	-
ETHYL ALCOHOL 64-17-5	-	-	124.7 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*

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

4.06005% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
ETHYL ALCOHOL 64-17-5		12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through		9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static
ACETALDEHYDE 75-07-0	237 - 249: 120 h Nitzschia linearis mg/L EC50	28.0 - 34.0: 96 h Pimephales promelas mg/L LC50 flow-through 53: 96 h Lepomis macrochirus mg/L LC50 static 1.8 - 2.4: 96 h Oncorhynchus mykiss mg/L LC50 static 39.8 - 46.8: 96 h Pimephales promelas mg/L LC50 static		3.64 - 6.15: 48 h Daphnia magna mg/L EC50 Static 48.3: 48 h Daphnia magna mg/L EC50
BENZYL ALCOHOL 100-51-6	35: 3 h Anabaena variabilis mg/L EC50	10: 96 h Lepomis macrochirus mg/L LC50 static 460: 96 h Pimephales promelas mg/L LC50 static	EC50 = 50 mg/L 5 min EC50 = 63.7 mg/L 15 min EC50 = 63.7 mg/L 5 min EC50 = 71.4 mg/L 30 min	23: 48 h water flea mg/L EC50

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

Chemical Name	log Pow
ETHYL ALCOHOL 64-17-5	-0.32
ACETALDEHYDE 75-07-0	0.5
BENZYL ALCOHOL 100-51-6	1.1

**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

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes

ACETALDEHYDE 75-07-0				U001
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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

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

##### ICAO/IATA

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

##### IMDG / IMO

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

#### 15. REGULATORY INFORMATION

##### International Inventories

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

##### 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**

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	0.3	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
PROPYLENE GLYCOL 57-55-6	X		X
ETHYL ALCOHOL 64-17-5	X	X	X
ACETALDEHYDE 75-07-0	X	X	X
ETHYL BUTYRATE 105-54-4	X	X	X
METHYL EUGENOL 93-15-2	X		
BENZONITRILE 100-47-0	X	X	X

**U.S. EPA Label information**

**16. OTHER INFORMATION**

<u>NFPA</u>	Health Hazard 2	Flammability 3	Instability 0	Physical and chemical hazards *
<u>HMIS</u>	Health Hazard 2	Flammability 3	Physical Hazard 0	Personal protection b

Revision Date 21-Jul-2015  
 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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