



This safety data sheet complies with the requirements of:  
 OSHA CFR Title 29 CFR 1910.1200

Version 1

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

**Product identifier**  
**Product Code(s)** 348  
**Product name** STRAWBERRY KIWI TYPE, NATURAL FLAVOR BLEND

**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**

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

**GHS Label elements, including precautionary statements**

**Emergency Overview**

**Danger**

**Hazard Statements**  
 Causes serious eye irritation  
 May cause an allergic skin reaction  
 May cause cancer  
 Flammable liquid and vapor

**Appearance** liquid                      **Physical state** liquid                      **Aroma** typical of strawberry kiwi



**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**

**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>
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>	IDLH: 2000 ppm TWA: 400 ppm TWA: 1400

**348 STRAWBERRY KIWI TYPE, NATURAL FLAVOR BLEND**

**Revision Date 22-Jul-2020**

		(vacated) TWA: 400 ppm (vacated) TWA: 1400 mg/m <sup>3</sup>	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>
FURFURAL 98-01-1	TWA: 2 ppm S*	TWA: 5 ppm TWA: 20 mg/m <sup>3</sup> (vacated) TWA: 2 ppm (vacated) TWA: 8 mg/m <sup>3</sup> (vacated) S* S*	IDLH: 100 ppm
BENZYL ACETATE 140-11-4	TWA: 10 ppm	-	
DIMETHYL SULFIDE 75-18-3	TWA: 10 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 must 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>	liquid
<b>Aroma</b>	typical of strawberry kiwi
<b>Color</b>	No information available

<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	28 °C / 83 °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	1.0045 - 1.0245	FCC Method
Specific Gravity @ 20C	1.0075 - 1.0275	FCC Method
Refractive Index @ 20C	1.4155 - 1.4355	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	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
ETHYL BUTYRATE 105-54-4	13 g/kg ( Rat )	2 g/kg ( Rabbit )	-

**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

ACGIH (American Conference of Governmental Industrial Hygienists)  
A3 - *Animal Carcinogen*  
IARC (International Agency for Research on Cancer)  
Group 1 - *Carcinogenic to Humans*  
NTP (National Toxicology Program)  
Known - *Known 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**

Harmful to aquatic life with long lasting effects

0.08713% 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

**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 U001 U112 U125

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
ETHYL BUTYRATE 105-54-4	Ignitable

**14. TRANSPORT INFORMATION**

**DOT/ADR**

**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 -  
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 does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**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).

**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.

**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
ACETALDEHYDE - 75-07-0	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
GLYCERINE 56-81-5	X	X	X
ETHYL BUTYRATE 105-54-4	X	X	X
ETHYL ACETATE 141-78-6	X	X	X
ETHYL BENZOATE 93-89-0			X

**U.S. EPA Label information**

**16. OTHER INFORMATION**

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

Revision Date 22-Jul-2020  
Revision Note No information available

Revision# 1

**WARNING/DISCLAIMER:**

The ingredients/flavors provided by Trilogy have not been tested, nor have they been deemed safe, for inhalation or use in electronic smoking devices, electronic nicotine delivery systems, electronic cigarettes or other similar devices (collectively "E-Cigarettes"). In supplying ingredients/flavors, Trilogy instructs, and by receiving such ingredients/flavors recipient confirms, that the ingredients/flavors will not be used in connection with the manufacture and distribution of E-Cigarettes or any component thereof.

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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