



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) 958CBD
Product name SWEET MIXED BERRY TYPE FLAVOR, NATURAL (OIL SOLUBLE)

UN/ID No 1993

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/ Outside US Chemtel 813-248-0585.

2. HAZARDS IDENTIFICATION

Classification

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Serious eye damage/eye irritation	Category 2A
Skin Sensitization	Category 1
Carcinogenicity	Category 1A
Flammable liquids	Category 2

GHS Label elements, including precautionary statements

Emergency Overview

Danger

Hazard Statements
 Harmful if inhaled
 Causes serious eye irritation
 May cause an allergic skin reaction
 May cause cancer
 Highly flammable liquid and vapor

Appearance liquid

Physical state liquid

Aroma No information available

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

- May be harmful if swallowed
- Harmful to aquatic life with long lasting effects
- Harmful to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade Secret
ETHYL ALCOHOL	64-17-5	5-10%	*
BENZYL ALCOHOL	100-51-6	1-5%	*
2-Butanone, 4-(4-hydroxyphenyl)-	5471-51-2	1-5%	*
ETHYL BUTYRATE	105-54-4	1-5%	*
ETHYL ACETATE	141-78-6	1-5%	*
VANILLIN	121-33-5	1-5%	*
TRANS-2-HEXENAL	6728-26-3	<1	*

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice

Immediate medical attention is required. Show this material safety data sheet to the doctor in attendance.

Eye contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

Skin contact

Wash off immediately with plenty of water.

Inhalation

Immediate medical attention is not required. If symptoms persist, call a physician. Move to fresh air in case of accidental inhalation of vapors or decomposition products.

Ingestion

Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician. Do NOT induce vomiting.

Self-protection of the first aider

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. Dry chemical. Carbon dioxide CO₂. Water spray. Alcohol-resistant foam.

Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Keep product and empty container away from heat and sources of ignition. Risk of ignition.

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 Evacuate personnel to safe areas. Remove all sources of ignition. 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. Pick up and transfer to properly labeled containers. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. 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.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep in properly labeled containers. Keep tightly closed in a dry and cool 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 ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m ³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m ³
ETHYL ACETATE 141-78-6	TWA: 400 ppm	TWA: 400 ppm TWA: 1400 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 1400 mg/m ³	IDLH: 2000 ppm TWA: 400 ppm TWA: 1400 mg/m ³
ISOAMYL ALCOHOL 123-51-3	STEL: 125 ppm TWA: 100 ppm	TWA: 100 ppm TWA: 360 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 360 mg/m ³ (vacated) STEL: 125 ppm (vacated) STEL: 450 mg/m ³	IDLH: 500 ppm TWA: 100 ppm TWA: 360 mg/m ³ STEL: 125 ppm STEL: 450 mg/m ³
DIMETHYL SULFIDE 75-18-3	TWA: 10 ppm	-	
ISOBUTYL ACETATE 110-19-0	TWA: 150 ppm	TWA: 150 ppm TWA: 700 mg/m ³ (vacated) TWA: 150 ppm (vacated) TWA: 700 mg/m ³	IDLH: 1300 ppm TWA: 150 ppm TWA: 700 mg/m ³
ACETALDEHYDE 75-07-0	Ceiling: 25 ppm	TWA: 200 ppm TWA: 360 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 180 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 270 mg/m ³	IDLH: 2000 ppm
ISOAMYL ACETATE 123-92-2	STEL: 100 ppm TWA: 50 ppm	TWA: 100 ppm TWA: 525 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 525 mg/m ³	IDLH: 1000 ppm TWA: 100 ppm TWA: 525 mg/m ³
ACETOPHENONE 98-86-2	TWA: 10 ppm	-	
FURFURAL 98-01-1	TWA: 2 ppm S*	TWA: 5 ppm TWA: 20 mg/m ³ (vacated) TWA: 2 ppm (vacated) TWA: 8 mg/m ³ (vacated) S* S*	IDLH: 100 ppm
BENZYL ACETATE 140-11-4	TWA: 10 ppm	-	
PINENES 80-56-8	TWA: 20 ppm	-	
CITRAL 5392-40-5	TWA: 5 ppm inhalable fraction and vapor S*	-	
BENZONITRILE 100-47-0	-	TWA: 5 mg/m ³ CN (vacated) TWA: 5 mg/m ³ S*	IDLH: 25 mg/m ³ 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	Tightly fitting safety goggles.
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	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	liquid
Aroma	No information available
Color	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	21 °C / 70 °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	0.9242 - 0.9442	FCC Method
Specific Gravity @ 20C	0.9272 - 0.9472	FCC Method
Refractive Index @ 20C	1.4331 - 1.4531	FCC Method
Water solubility	Insoluble in water	
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

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

Product Information Product does not present an acute toxicity hazard based on known information

Inhalation There is no data available for this product.

Eye contact There is no data available for this product.

Skin contact There is no data available for this product.

Ingestion 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
BENZYL ALCOHOL 100-51-6	1230 mg/kg (Rat)	2000 mg/kg (Rabbit)	8.8 mg/L (Rat) 4 h
ETHYL BUTYRATE 105-54-4	13 g/kg (Rat)	2 g/kg (Rabbit)	-
ETHYL ACETATE 141-78-6	5620 mg/kg (Rat)	20 mL/kg (Rabbit)	-
PROPYLENE GLYCOL 57-55-6	20000 mg/kg (Rat)	20800 mg/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 3 - Not Classifiable as to Carcinogenicity in Humans

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	Eyes, Kidney, Respiratory system, Skin, Blood, Central nervous system, Liver, Reproductive system.
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

1.09762% of the mixture consists of components(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
BENZYL ALCOHOL 100-51-6	1.1
ETHYL ACETATE 141-78-6	0.6
VANILLIN 121-33-5	1.23

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 U004 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
ETHYL ACETATE 141-78-6	Toxic Ignitable

14. TRANSPORT INFORMATION

DOT/ADR

UN/ID No 1993
 Proper shipping name FLAMMABLE LIQUID, N.O.S. (ETHYL ALCOHOL, ETHYL ACETATE)
 Hazard class 3
 Packing Group II
 ERG Code 128

ICAO/IATA

UN/ID No 1993
 Proper shipping name FLAMMABLE LIQUID, N.O.S. (ETHYL ALCOHOL, ETHYL ACETATE)
 Hazard class 3
 Packing Group II
 ERG Code 128

IMDG / IMO

UN/ID No 1993
 Proper shipping name FLAMMABLE LIQUID, N.O.S. (ETHYL ALCOHOL, ETHYL ACETATE)
 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

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	Yes
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.

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
ETHYL ACETATE 141-78-6	5000 lb		RQ 5000 lb final RQ RQ 2270 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
ACETALDEHYDE - 75-07-0	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
ETHYL ALCOHOL 64-17-5	X	X	X
ETHYL BUTYRATE 105-54-4	X	X	X
ETHYL ACETATE 141-78-6	X	X	X
PROPYLENE GLYCOL 57-55-6	X		X
METHYL EUGENOL 93-15-2	X		
BENZONITRILE 100-47-0	X	X	X

U.S. EPA Label information

16. OTHER INFORMATION

NFPA	Health Hazard 2	Flammability 4	Instability 0	Physical and chemical hazards *
HMIS	Health Hazard 2	Flammability 4	Physical Hazard 0	Personal protection B

Revision Date 05-Nov-2021
Revision Note No information available

Revision# 1

WARNING/DISCLAIMER:

Our ingredients have not been tested, nor have they been determined safe, for inhalation or use in any electronic smoking devices, electronic nicotine delivery systems, electronic cigarettes, or other similar devices (collectively "E-Cigarettes") or in any E-Liquids used with E-Cigarettes. By receiving Apex Flavors, Inc ingredients, the recipient confirms that they will not use these ingredients in connection with the manufacture and distribution of E-Cigarettes, E-Liquids or any component thereof. WE DISCLAIM, TO THE FULLEST EXTENT PERMITTED BY LAW, ALL WARRANTIES, EXPRESS OR IMPLIED, and disclaim all liability in connection with the use of our ingredients in connection with E-Cigarettes and E-Liquids. All such risks are assumed by you and the user.

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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