

SAFETY DATA SHEET.

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) Product name

350, 350TTB BANANA CREAM PIE EXTRACT, NATURAL & ARTIFICIAL

UN/ID No

Recommended use of the chemical and restrictions on useRecommended UseNo information available.Uses advised againstNo information available

1197

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
Carcinogenicity	Category 1A
Flammable liquids	Category 3

GHS Label elements, including precautionary statements

 Danger

 Hazard Statements

 Causes serious eye irritation

 May cause cancer

 Flammable liquid and vapor

 Appearance liquid

 Physical state
 liquid

 Aroma
 No information available

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

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 (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower In case of fire: Use CO2, 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%	*
GLYCERINE	56-81-5	5-10%	*
VANILLIN	121-33-5	1-5%	*

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	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.	
Skin contact	Wash off immediately with plenty of water.	
Inhalation	Move to fresh air.	
Ingestion	Clean mouth with water and drink afterwards plenty of water.	
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 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 containn	nent 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.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
ETHYL ALCOHOL	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900	IDLH: 3300 ppm
64-17-5		mg/m ³	TWA: 1000 ppm TWA: 1900
		(vacated) TWA: 1000 ppm	mg/m ³
		(vacated) TWA: 1900 mg/m ³	_
GLYCERINE	-	TWA: 15 mg/m ³ mist, total	
56-81-5		particulate TWA: 5 mg/m ³ mist,	
		respirable fraction	

		(vacated) TWA: 10 mg/m ³ mist, total particulate (vacated) TWA: 5 mg/m ³ mist, respirable fraction	
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/m³
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
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/m³
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
Trade Secret	TWA: 50 ppm	TWA: 100 ppm TWA: 465 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 465 mg/m ³	IDLH: 800 ppm TWA: 100 ppm TWA: 465 mg/m ³
DIMETHYL SULFIDE 75-18-3	TWA: 10 ppm	-	
ACETYL PROPIONYL FCC (2,3 PENTANEDIONE) 600-14-6	STEL: 31 ppb	-	IDLH: TWA: 9.3 ppb
PINENES 80-56-8	TWA: 20 ppm	-	
NERAL 106-26-3	TWA: 5 ppm inhalable fraction and vapor S*	-	

NIOSH IDLH: Immediately Dangerous to Life or Health

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

Exposure controls

Other Exposure Guidelines

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	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 Appearance Aroma Color	liquid liquid No information available No information available
Property	<u>Values</u>
рН	
Melting/freezing point	
Boiling point/boiling range	
Flash Point	27 °C / 80 °F
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Flammability Limits in Air	
Upper flammability limit	No information available
lower flammability limit	No information available
Vapor pressure mm Hg 20°C	
Vapor density	0.9731 - 0.9931
Specific Gravity @ 25C Specific Gravity @ 20C	0.9761 - 0.9961
Refractive Index @ 20C	1.4010 - 1.4210
Water solubility	Soluble
Solubility in other solvents	Soluble
Partition coefficient: n-octanol/wat	er
Autoignition temperature	No information available
Decomposition temperature	
Viscosity, kinematic	No information available
Viscosity, dynamic	No information available
Explosive properties	No information available
Oxidizing Properties	No information available
Other information	

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

Method

No information available FCC Method FCC Method Closed cup No information available No information available No information available

No information available No information available FCC Method FCC Method FCC Method

No information available No information available No information available No information available 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

Chemical Name	Oral LD50	Dermal LD50	LC50 Inhalation	
Ingestion	There is no data available for this product.			
Skin contact	There is no data available for this product.			
Eye contact	There is no data available	There is no data available for this product.		
Inhalation	There is no data available	There is no data available for this product.		
Product Information	Product does not present an acute toxicity hazard based on known information			

Chemical Name	Oral LD50	Dermal LD50	LC50 Inhalation
PROPYLENE GLYCOL	20000 mg/kg (Rat)	20800 mg/kg (Rabbit)	-
57-55-6			
ETHYL ALCOHOL	7060 mg/kg (Rat)	-	124.7 mg/L (Rat)4 h
64-17-5			
GLYCERINE	-	10 g/kg (Rabbit)	570 mg/m³ (Rat)1 h
56-81-5			- · · /

Information on toxicological effects

Symptoms

No information available.

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

Sensitization Germ Cell Mutagenicity Carcinogenicity

No information available.

No information available.

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	A3	Group 1	Known	Х
64-17-5				
		le se deut e l'il le seut e se tie die N		

ACGIH (American Conference of G A3 - Animal Carcinogen	overnmental Industrial Hygienists)
IARC (International Agency for Res	search on Cancer)
Group 1 - Carcinogenic to Humans	
Group 3 - Not Classifiable as to Carc	inogenicity in Humans
NTP (National Toxicology Program	
Known - Known Carcinogen	
	ealth Administration of the US Department of Labor)
X - Present	
Reproductive toxicity	No information available.
Specific target organ systemic	No information available.
toxicity (single exposure)	
Specific target organ systemic	No information available.
toxicity (repeated exposure)	
Chronic toxicity	May cause adverse liver effects. Contains a known or suspected reproductive toxin.
,	Blood, Central nervous system, Eves, Liver, Reproductive system, Respiratory system,
5 5 6	
Aspiration hazard	No information available.
OSHA (Occupational Safety and He X - Present Reproductive toxicity Specific target organ systemic toxicity (single exposure) Specific target organ systemic toxicity (repeated exposure) Chronic toxicity Target Organ Effects	No information available. No information available. May cause adverse liver effects. Contains a known or suspected reproductive toxin. Blood, Central nervous system, Eyes, Liver, Reproductive system, Respiratory system, Skin, Kidney.

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 with long lasting effects

11.61617% 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	-0.32
64-17-5	
GLYCERINE	-1.76
56-81-5	
VANILLIN	1.23
121-33-5	

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 U001 U112 U203

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

14. TRANSPORT INFORMATION

DOT/ADR

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

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

Packing Group	III
ERG Code	127
IMDG / IMO UN/ID No Proper shipping name Hazard class Packing Group	1197 EXTRACTS, FLAVOURING, LIQUID 3 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
SAFROLE - 94-59-7	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
PROPYLENE GLYCOL 57-55-6	Х		Х
ETHYL ALCOHOL 64-17-5	Х	X	Х
GLYCERINE 56-81-5	Х	X	Х
ISOAMYL ACETATE 123-92-2	Х	X	Х
ETHYL ACETATE 141-78-6	Х	X	Х
ISOBUTYL ACETATE 110-19-0	Х	X	Х
BUTYRIC ACID 107-92-6	Х	X	Х
Trade Secret	Х	X	Х
TERPINOLENE 586-62-9	Х		
METHYL EUGENOL 93-15-2	Х		

U.S. EPA Label information

16. OTHER INFORMATION

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

Revision Date	12-May-2021
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.

end