APEX FLAVORS, INC.

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard (29 CFR 1910.1200) and Canada WHMIS 2015 which includes the amended Hazardous Products Act (HPA) and the Hazardous Products Regulation (HPR)

Revision date 01-May-2024 Revision Number 1

1. Identification

Product identifier

Product Name Apple Cider Donut Type, Natural Flavor Blend

Other means of identification

Product Code(s) SC-ITEM 1595

UN number or ID number UN1197

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use Food and Beverage Flavoring

Restrictions on use No information available

Details of the supplier of the safety data sheet

Manufacturer Address

Apex Flavors, Inc. 1361 Brass Mill Rd Suite E Belcamp, MD 21017-1239 United States (410) 565-6600

E-mail address sds@apexflavors.com

Emergency telephone number

Company Phone Number 410-565-6600

Emergency Telephone Chemtrec 1-800-424-9300

2. Hazard(s) identification

Classification

Flammable liquids	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 1 Category 3
Specific target organ toxicity (repeated exposure)	Category 1

Label elements



Danger

Hazard statements

Combustible liquid.

Causes skin irritation.

Causes serious eye irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

Causes damage to organs.

May cause respiratory irritation. May cause drowsiness or dizziness.

Causes damage to organs through prolonged or repeated exposure.

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling.

In case of inadequate ventilation wear respiratory protection.

Contaminated work clothing must not be allowed out of the workplace.

Do not breathe dust, fume, gas, mist, vapors and spray.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Keep away from flames and hot surfaces. - No smoking.

Wear protective gloves, eye protection and face protection.

Keep cool.

Precautionary Statements - Response

Specific treatment (see .? on this label).

IF exposed: Call a POISON CENTER or doctor.

Eyes

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 and attention.

Skin

IF ON SKIN: Wash with plenty of water and soap.

Take off contaminated clothing and wash it before reuse.

If skin irritation or rash occurs: Get medical advice and attention.

Inhalation

If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Fire

In case of fire: Use CO2, dry chemical, or foam to extinguish.

Precautionary Statements - Storage

Store locked up.

Store in a well-ventilated place. Keep container tightly closed.

Precautionary Statements - Disposal

Dispose of contents and container to an approved waste disposal plant.

Other information

No information available.

3. Composition/information on ingredients

Substance

Not applicable.

<u>Mixture</u>

Chemical name	CAS No.	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
PROPYLENE GLYCOL USP	57-55-6	75.00 - 95.00	-	-
ACETIC ACID (NATURAL)	64-19-7	1.00 - 4.00	-	-
ACETOIN 96/100% FCC NATURAL	513-86-0	<1.00	-	-

4. First-aid measures

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation May cause allergic respiratory reaction. If breathing has stopped, give artificial respiration.

Get medical attention immediately. Remove to fresh air. Avoid direct contact with skin. Use

barrier to give mouth-to-mouth resuscitation. Get immediate medical attention.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep

eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms persist, call a physician. Get medical

attention if irritation develops and persists.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. May cause an allergic skin reaction. If symptoms persist, call a

physician.

Ingestion May produce an allergic reaction. Do NOT induce vomiting. Rinse mouth. Never give

anything by mouth to an unconscious person. Get immediate medical attention.

Self-protection of the first aider Remove all sources of ignition. Ensure that medical personnel are aware of the material(s)

involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. See section

8 for more information.

Most important symptoms and effects, both acute and delayed

Symptoms May cause allergy or asthma symptoms or breathing difficulties if inhaled. Coughing and/ or

wheezing. Itching. Rashes. Hives. May cause redness and tearing of the eyes. Burning sensation. Inhalation of high vapor concentrations may cause symptoms like headache,

dizziness, tiredness, nausea and vomiting.

Effects of Exposure Causes damage to organs. Causes damage to organs through prolonged or repeated

exposure.

Indication of any immediate medical attention and special treatment needed

Note to physiciansMay cause sensitization in susceptible persons. Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing mediaDo not scatter spilled material with high pressure water streams.

Specific hazards arising from the

chemical

Keep product and empty container away from heat and sources of ignition. In the event of

fire, cool tanks with water spray. Product is or contains a sensitizer. May cause

sensitization by inhalation. May cause sensitization by skin contact.

Explosion data

Sensitivity to mechanical impact None. Sensitivity to static discharge Yes.

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required. See

section 8 for more information. Take precautionary measures against static discharges. Do not touch or walk through spilled material. Avoid contact with skin, eyes or clothing. Ensure

adequate ventilation. Keep people away from and upwind of spill/leak.

Other information Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. Dike far

ahead of liquid spill for later disposal.

Methods for cleaning up

Take precautionary measures against static discharges. Dam up. Soak up with inert

absorbent material. Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Use personal protection equipment. Do not breathe vapor or mist. Keep away from heat,

hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Use with local exhaust ventilation. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated

clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

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

heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Store locked up. Keep out

of the reach of children.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
ACETIC ACID (NATURAL)	STEL: 15 ppm	TWA: 10 ppm TWA: 25 mg/m ³	IDLH: 50 ppm
64-19-7	TWA: 10 ppm	(vacated) TWA: 10 ppm	TWA: 10 ppm TWA: 25 mg/m ³
		(vacated) TWA: 25 mg/m ³	STEL: 15 ppm STEL: 37
			mg/m³

Chemical name	Alberta	British Columbia	Ontario	Quebec
PROPYLENE GLYCOL USP	-	-	TWA: 10 mg/m ³ TWA:	-
57-55-6			50 ppm TWA: 155	
			mg/m³	
ACETIC ACID (NATURAL)	TWA: 10 ppm TWA: 25	TWA: 10 ppm	TWA: 10 ppm	TWA: 10 ppm TWA: 25
64-19-7	mg/m³	STEL: 15 ppm	STEL: 15 ppm	mg/m³
	STEL: 15 ppm STEL:			STEL: 15 ppm STEL:
	37 mg/m ³			37 mg/m ³

Appropriate engineering controls

Engineering controls Showers

> Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

Hand protection Wear suitable gloves. Impervious gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Do not eat, drink or smoke when using this product. Contaminated work clothing should not

be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Liquid

Appearance No information available

Colorlight brownOdorsweet

Odor threshold No information available

Property Values Remarks • Method

pHNo data availableNone knownMelting point / freezing pointNo data availableNone knownInitial boiling point and boilingNo data availableNone known

range

Flash point71 °C / 159.8 °FNone knownEvaporation rateNo data availableNone knownFlammabilityNo data availableNone knownFlammability Limit in AirNone known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapor pressure No data available None known Relative vapor density No data available None known Relative density 0.9989 - 1.1059 None known Water solubility Soluble in water None known Solubility(ies) No data available None known **Partition coefficient** No data available None known **Autoignition temperature** No data available None known **Decomposition temperature** No data available None known Kinematic viscosity No data available None known **Dynamic viscosity** No data available None known

Other information

Explosive properties No information available Oxidizing properties No information available Softening point No information available Molecular weight No information available **VOC** content No information available **Liquid Density** No information available **Bulk density** No information available Specific Gravity @ 25C 0.9959 - 1.1059 Specific Gravity @ 20C 0.9989 - 1.1089 Refractive Index @ 20C 1.4236 - 1.4436

10. Stability and reactivity

Reactivity No information available.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions
None under normal processing.

Conditions to avoid Heat, flames and sparks.

Incompatible materials Strong acids. Strong bases. Strong oxidizing agents.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. May cause sensitization in

susceptible persons. (based on components). May cause irritation of respiratory tract. May

cause drowsiness or dizziness.

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye

irritation. (based on components). May cause redness, itching, and pain.

Skin contact Specific test data for the substance or mixture is not available. Repeated or prolonged skin

contact may cause allergic reactions with susceptible persons. (based on components).

May cause sensitization by skin contact. Causes skin irritation.

Ingestion Specific test data for the substance or mixture is not available. May cause additional affects

as listed under "Inhalation". Ingestion may cause gastrointestinal irritation, nausea, vomiting

and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling

of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing. Coughing and/ or wheezing. Itching. Rashes. Hives. Redness. May cause redness and tearing of the eyes. Inhalation of high vapor concentrations may cause symptoms like

headache, dizziness, tiredness, nausea and vomiting.

Acute toxicity .

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 19,717.10 mg/kg
ATEmix (dermal) 16,174.80 mg/kg
ATEmix (inhalation-gas) 99,999.00 ppm
ATEmix (inhalation-vapor) 99,999.00 mg/l
ATEmix (inhalation-dust/mist) 15.10 mg/l

Component Information

Che	mical name	Oral LD50		Dermal LD50		Inhalatio	n LC50
_	NE GLYCOL USP 57-55-6	20000 mg/kg	(Rat)	20800 mg/kg	(Rabbit)	-	
	ACID (NATURAL) 64-19-7	3310 mg/kg	(Rat)	1060 mg/kg	(Rabbit)	11.4 mg/L	(Rat) 4 h

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

Skin corrosion/irritationClassification based on data available for ingredients. Causes skin irritation.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.

Respiratory or skin sensitization May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an

allergic skin reaction.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure If this product is a mixture, the classification is not based on toxicology studies for this

product, but is based solely on toxicology studies for ingredients found within this product. More detailed substance and/or ingredient information may be provided in the other sections of this SDS. May cause drowsiness or dizziness. May cause respiratory irritation. Based on the classification criteria of the Globally Harmonized System as adopted in the country or region with which this safety data sheet complies, this product has been determined to cause systemic target organ toxicity from acute exposure. (STOT SE).

STOT - repeated exposureCauses damage to organs through prolonged or repeated exposure.

Aspiration hazard No information available.

12. Ecological information

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
PROPYLENE GLYCOL USP	19000: 96 h	41 - 47: 96 h	-	1000: 48 h Daphnia
57-55-6	Pseudokirchneriella	Oncorhynchus mykiss		magna mg/L EC50
	subcapitata mg/L EC50	mL/L LC50 static		Static 10000: 24 h
		51400: 96 h Pimephales		Daphnia magna mg/L
		promelas mg/L LC50		EC50
		static 51600: 96 h		
		Oncorhynchus mykiss		
		mg/L LC50 static 710:		
		96 h Pimephales		
		promelas mg/L LC50		
ACETIC ACID (NATURAL)	-	75: 96 h Lepomis	-	47: 24 h Daphnia
64-19-7		macrochirus mg/L LC50		magna mg/L EC50 65:
		static 79: 96 h		48 h Daphnia magna
		Pimephales promelas		mg/L EC50 Static
		mg/L LC50 static		

Persistence and degradability No information available.

Bioaccumulation

Component Information

omponent information				
Chemical name	Partition coefficient			
ACETIC ACID (NATURAL)	-0.31			

64-19-7

Other adverse effects No information available.

13. Disposal considerations

Disposal methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging Do not reuse empty containers.

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

a hazardous waste.

14. Transport information

DOT

UN number or ID number UN1197

Proper shipping name Extracts, flavoring, liquid

Transport hazard class(es) 3
Packing group III
DOT Marine Pollutant NP

Description UN1197, Extracts, flavoring, liquid, 3, III

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Special Provisions B1, IB3, T2, TP1

Emergency Response Guide

Number

TDG

UN number or ID number UN1197

UN proper shipping name Extracts, flavouring, liquid

Transport hazard class(es) 3
Packing group III

Description UN1197, Extracts, flavouring, liquid, 3, III

MEX

UN number or ID number UN1197

UN proper shipping name Extracts, flavouring, liquid

Transport hazard class(es) 3
Packing group III

Description UN1197, Extracts, flavouring, liquid, 3, III

Special Provisions 223

ICAO (air)

UN number or ID number UN1197
UN proper shipping name Extracts, liquid

Transport hazard class(es) 3
Packing group III

Description UN1197, Extracts, liquid, 3, III

Special Provisions A3

IATA

UN number or ID number UN1197
UN proper shipping name Extracts, liquid

Transport hazard class(es) 3
Packing group III
ERG Code 3L
Special Provisions A3

Description UN1197, Extracts, liquid, 3, III

UN number or ID number UN1197
UN proper shipping name Extracts, liquid Transport hazard class(es) 3

Packing groupIIIEmS-No.F-E, S-DSpecial Provisions223, 955Marine pollutantNP

Description UN1197, Extracts, liquid, 3, III

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

TSCA Contact supplier for inventory compliance status.

Chemical name	CAS No.	Inventory Listing Status	Commercial Activity Designation
PROPYLENE GLYCOL USP	57-55-6	-	Unknown *
ACETIC ACID (NATURAL)	64-19-7	-	Unknown *
ACETOIN 96/100% FCC NATURAL	513-86-0	-	Unknown *

^{*}Contact supplier for details. One or more substances in this product are either not listed on the US TSCA inventory, listed on the confidential US TSCA inventory or are otherwise exempted from inventory listing requirements

DSL/NDSL Contact supplier for inventory compliance status. **EINECS/ELINCS** Contact supplier for inventory compliance status. **ENCS** Contact supplier for inventory compliance status. **IECSC** Contact supplier for inventory compliance status. Contact supplier for inventory compliance status. KECL Contact supplier for inventory compliance status. **PICCS** Contact supplier for inventory compliance status. AIIC **NZIoC** Contact supplier for inventory compliance status.

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

AIIC - Australian Inventory of Industrial Chemicals NZIoC - New Zealand Inventory of Chemicals

US 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

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable	CWA - Toxic Pollutants	CWA - Priority	CWA - Hazardous
	Quantities		Pollutants	Substances
	Quantities		Poliularits	Substances
ACETIC ACID (NATURAL)	5000 lb	-	-	X
64-19-7				

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	Reportable Quantity (RQ)
ACETIC ACID (NATURAL) 64-19-7	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
PROPYLENE GLYCOL USP 57-55-6	Х	-	X
ACETIC ACID (NATURAL) 64-19-7	Х	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

Instability 0 **NFPA** Health hazards 3 Flammability 2 Special hazards -**HMIS** Health hazards 2 * Flammability 2 Physical hazards 0 Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: Exposure controls/personal protection

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value Sk* Skin designation

+ Sensitizers

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA) EPA (Environmental Protection Agency) Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

U.S. National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization

Revision date 01-May-2024

Revision NoteNo information available.

Disclaimer

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 on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet

North America

North America SDS version information - NGHS

UL release: GHS Revision 3 2023 Q3

North America

Full process, including GHS and Transportation Wizards

Specific target organ toxicity (single exposure)	Category 1, Category 3
Category 1	
Specific target organ toxicity (repeated exposure)	Category 1

Chemical name	California Hazardous Waste Status
ACETIC ACID (NATURAL)	Toxic Corrosive Ignitable
64-19-7	-