

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 13-Feb-2024

Revision Number 1

1. Identification

Product identifier

Product Name Sugar Cookie Type, Natural & Artificial (Contains < 0.10% Artificial Top Note)

Other means of identification

Product Code(s) SC-ITEM 1299

UN number or ID number UN1197

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use Flavors

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

| | |
|--|-----------------------|
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 2 |
| Skin sensitization | Category 1 |
| Germ cell mutagenicity | Category 1B |
| Carcinogenicity | Category 1A |
| Reproductive toxicity | Category 1A |
| Specific target organ toxicity (single exposure) | Category 1 Category 3 |
| Specific target organ toxicity (repeated exposure) | Category 1 |

Label elements



Danger

Hazard statements

Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.
May cause genetic defects.
May cause cancer.
May damage fertility or the unborn child.
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

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves, protective clothing, eye protection and face protection.
Wash face, hands and any exposed skin thoroughly after handling.
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.

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 INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor if you feel unwell.

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

Toxic to aquatic life with long lasting effects.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

| 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 | 60.00 - 75.00 | - | - |
| BEVERAGE BASE (TRIETHYL CITRATE) (WATER SOLUBLE) | 64-17-5 | 15.00 - 30.00 | - | - |
| FURFURAL | 98-01-1 | <1.00 | - | - |
| ACETYL PROPIONYL FCC (2,3 PENTANEDIONE) | 600-14-6 | <1.00 | - | - |

4. First-aid measures

Description of first aid measures

- General advice** Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention.
- Inhalation** Remove to fresh air. IF exposed or concerned: Get medical advice/attention. Get medical attention immediately if symptoms occur.
- Eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
- Skin contact** May cause an allergic skin reaction. If symptoms persist, call a physician. Wash off immediately with soap and plenty of water for at least 15 minutes.
- Ingestion** Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician.
- Self-protection of the first aider** Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

- Symptoms** 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** May cause cancer. May cause adverse reproductive effects - such as birth defect, miscarriages, or infertility. Mutagenic effects. 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 physicians** May cause sensitization in susceptible persons. Treat symptomatically.

5. Fire-fighting measures

| | |
|---|--|
| Suitable Extinguishing Media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Large Fire | CAUTION: Use of water spray when fighting fire may be inefficient. |
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams. |
| Specific hazards arising from the chemical | Product is or contains a sensitizer. May cause sensitization by skin contact. |
| Explosion data | |
| Sensitivity to mechanical impact | None. |
| Sensitivity to static discharge | None. |
| 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 | Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. 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 | 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. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. 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. Remove contaminated clothing and shoes. Avoid breathing vapors or mists. |
|--------------------------------|---|

Conditions for safe storage, including any incompatibilities

| | |
|---------------------------|---|
| Storage Conditions | Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. |
|---------------------------|---|

8. Exposure controls/personal protection

Control parameters
Exposure Limits

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH |
|---|------------------|---|---|
| BEVERAGE BASE (TRIETHYL CITRATE) (WATER SOLUBLE) 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 |
| 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 |
| ACETYL PROPIONYL FCC (2,3 PENTANEDIONE) 600-14-6 | STEL: 31 ppb | - | IDLH: TWA: 9.3 ppb |

| Chemical name | Alberta | British Columbia | Ontario | Quebec |
|---|--|--------------------|--|--|
| PROPYLENE GLYCOL USP 57-55-6 | - | - | TWA: 10 mg/m ³ TWA: 50 ppm TWA: 155 mg/m ³ | - |
| BEVERAGE BASE (TRIETHYL CITRATE) (WATER SOLUBLE) 64-17-5 | TWA: 1000 ppm TWA: 1880 mg/m ³ | STEL: 1000 ppm | STEL: 1000 ppm | TWA: 1000 ppm TWA: 1880 mg/m ³ |
| FURFURAL 98-01-1 | TWA: 2 ppm TWA: 7.9 mg/m ³ Skin | TWA: 2 ppm Skin | TWA: 2 ppm Skin | TWA: 2 ppm TWA: 7.9 mg/m ³ Skin |

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or 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. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing.

9. Physical and chemical properties

Information on basic physical and chemical properties

| | |
|----------------|--------------------------|
| Physical state | Liquid |
| Appearance | Liquid |
| Color | dark orange |
| Odor | Sugar Cookie |
| Odor threshold | No information available |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|---|-------------------|-------------------------|
| pH | No data available | None known |
| Melting point / freezing point | No data available | None known |
| Initial boiling point and boiling range | No data available | None known |
| Flash point | 31 C. 87 F. | None known |
| Evaporation rate | No data available | None known |
| Flammability | No data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive limits | No data available | |
| Lower flammability or explosive limits | No data available | |
| Vapor pressure | No data available | None known |
| Relative vapor density | No data available | None known |
| Relative density | 0.9692 - 0.9862 | None known |
| Water solubility | Soluble in water | None known |
| Solubility(ies) | Water, ethanol | 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 | 0.9662 - 0.9862 |
| Specific Gravity @ 20C | 0.9692 - 0.9892 |
| Refractive Index @ 20C | 1.4111 - 1.4311 |

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 | None known based on information supplied. |
| 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 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 | May cause sensitization by 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). Causes skin irritation. |
| Ingestion | Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. |

Symptoms related to the physical, chemical and toxicological characteristics

| | |
|-----------------|--|
| Symptoms | 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) | 14,238.30 mg/kg |
| ATEmix (dermal) | 21,108.30 mg/kg |
| ATEmix (inhalation-gas) | 99,999.00 ppm |
| ATEmix (inhalation-vapor) | 99,999.00 mg/l |
| ATEmix (inhalation-dust/mist) | 69,487.70 mg/l |

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---------------------|-----------------------------|------------------------|
| PROPYLENE GLYCOL USP 57-55-6 | 20000 mg/kg (Rat) | 20800 mg/kg (Rabbit) | - |
| BEVERAGE BASE (TRIETHYL CITRATE) (WATER SOLUBLE) 64-17-5 | 7060 mg/kg (Rat) | - | 124.7 mg/L (Rat) 4 h |
| FURFURAL 98-01-1 | 125 mg/kg (Rat) | 500 - 1000 mg/kg (Rabbit) | 175 ppm (Rat) 6 h |
| ACETYL PROPIONYL FCC (2,3 PENTANEDIONE) 600-14-6 | 3 g/kg (Rat) | 2500 mg/kg (Rabbit) | - |

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

Skin corrosion/irritation Classification 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 an allergic skin reaction.

Germ cell mutagenicity Contains a known or suspected mutagen. Classification based on data available for ingredients. May cause genetic defects.

Carcinogenicity Contains a known or suspected carcinogen. Classification based on data available for ingredients. May cause cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical name | ACGIH | IARC | NTP | OSHA |
|--|-------|---------|-------|------|
| BEVERAGE BASE (TRIETHYL CITRATE) (WATER SOLUBLE) 64-17-5 | A3 | Group 1 | Known | X |
| FURFURAL 98-01-1 | A3 | Group 3 | - | - |

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

Occupational Safety and Health Administration of the US Department of Labor

X - Present

Reproductive toxicity Classification based on data available for ingredients. May damage fertility or the unborn child.

STOT - single exposure 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). Causes damage to organs. May cause respiratory irritation. May cause drowsiness or dizziness.

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

Aspiration hazard No information available.

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|------------------------------|---|---|----------------------------|---|
| PROPYLENE GLYCOL USP 57-55-6 | 19000: 96 h Pseudokirchneriella subcapitata mg/L EC50 | 41 - 47: 96 h Oncorhynchus mykiss mL/L LC50 static 51400: 96 h Pimephales promelas mg/L LC50 static 51600: 96 h | - | 1000: 48 h Daphnia magna mg/L EC50 Static 10000: 24 h Daphnia magna mg/L EC50 |

| | | | | |
|--|---|--|---|---|
| | | Oncorhynchus mykiss mg/L LC50 static 710: 96 h Pimephales promelas mg/L LC50 | | |
| BEVERAGE BASE (TRIETHYL CITRATE) (WATER SOLUBLE) 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 10800: 24 h Daphnia magna mg/L EC50 2: 48 h Daphnia magna mg/L EC50 Static |
| FURFURAL 98-01-1 | - | 13.4 - 19.3: 96 h Pimephales promelas mg/L LC50 static 16.79 - 26.35: 96 h Pimephales promelas mg/L LC50 flow-through | - | 29: 24 h Daphnia magna mg/L EC50 |

Persistence and degradability No information available.

Bioaccumulation

Component Information

| Chemical name | Partition coefficient |
|--|-----------------------|
| BEVERAGE BASE (TRIETHYL CITRATE) (WATER SOLUBLE) 64-17-5 | -0.32 |
| FURFURAL 98-01-1 | 0.67 |

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 I
Description UN1197, Extracts, flavoring, liquid, 3, III, Marine pollutant

Special Provisions B1, IB3, T2, TP1
 Emergency Response Guide Number 127

TDG

Notes No components found suitable for Marine Pollutant Name.
 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 group III
 EmS-No. F-E, S-D
 Special Provisions 223, 955
 Marine pollutant P
 Description UN1197, Extracts, liquid, 3, III, (0°C c.c.), Marine pollutant

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 * |
| BEVERAGE BASE (TRIETHYL CITRATE) (WATER SOLUBLE) | 64-17-5 | - | Unknown * |
| ACETOIN 96/100% FCC NATURAL | 513-86-0 | - | Unknown * |
| FURFURAL | 98-01-1 | - | Unknown * |
| ACETYL PROPIONYL FCC (2,3 PENTANEDIONE) | 600-14-6 | - | 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.
KECL Contact supplier for inventory compliance status.
PICCS Contact supplier for inventory compliance status.
AIIC Contact supplier for inventory compliance status.
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 Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| FURFURAL 98-01-1 | 5000 lb | - | - | X |

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) |
|---------------------|--------------------------|------------------------------------|--|
| FURFURAL 98-01-1 | 5000 lb | - | RQ 5000 lb final RQ RQ 2270 kg final RQ |

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:.

| Chemical name | California Proposition 65 |
|---|-----------------------------|
| BEVERAGE BASE (TRIETHYL CITRATE) (WATER SOLUBLE) - 64-17-5 | Carcinogen Developmental |

U.S. State Right-to-Know Regulations

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|---|------------|---------------|--------------|
| PROPYLENE GLYCOL USP 57-55-6 | X | - | X |
| BEVERAGE BASE (TRIETHYL CITRATE) (WATER SOLUBLE) 64-17-5 | X | X | X |
| FURFURAL 98-01-1 | X | X | X |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

| | | | | |
|--------------------|---------------------------|-----------------------|---------------------------|------------------------------|
| <u>NFPA</u> | Health hazards 3 | Flammability 0 | Instability 0 | Special hazards - |
| <u>HMIS</u> | Health hazards * 3 | Flammability 0 | 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 13-Feb-2024

Revision Note No 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 1, Category 3 |
| Specific target organ toxicity (repeated exposure) | Category 1 |

| Chemical name | RCRA - U Series Wastes | RCRA - P Series Wastes |
|---|-----------------------------------|------------------------|
| FURFURAL 98-01-1 | U125 | - |
| Chemical name | California Hazardous Waste Status | |
| BEVERAGE BASE (TRIETHYL CITRATE) (WATER SOLUBLE) 64-17-5 | Toxic Ignitable | |