

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 31-Jan-2026

Revision Number 1

## 1. Identification

### Product identifier

**Product Name** Caramel Type Flavor, Natural & Artificial

### Other means of identification

**Product Code(s)** SC-ITEM 2003

**UN number or ID number** UN3082

**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

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**

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**

Contaminated work clothing must not be allowed out of the workplace.  
Wear protective gloves.  
Do not breathe dust.  
Wash face, hands and any exposed skin thoroughly after handling.  
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.

**Skin**

IF ON SKIN: Wash with plenty of water and soap.  
If skin irritation or rash occurs: Get medical advice and attention.  
Wash contaminated clothing before reuse.

**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 in accordance with local, regional, national, and international regulations as applicable.

**Other information**

No information available.

### 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	57-55-6	65.00 - 95.00	-	-
BENZALDEHYDE	100-52-7	<1.00	-	-

## 4. First-aid measures

### Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.
Inhalation	Remove to fresh air. IF exposed or concerned: Get medical advice/attention.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
Skin contact	Wash with soap and water. May cause an allergic skin reaction. Wash off immediately with plenty of water for at least 15 minutes. If symptoms persist, call a physician.
Ingestion	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician.

### Most important symptoms and effects, both acute and delayed

Symptoms	Itching. Rashes. Hives. 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 physicians	May cause sensitization in susceptible persons. Treat symptomatically.
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## 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
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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. 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	Alberta	British Columbia	Ontario	Quebec
PROPYLENE GLYCOL 57-55-6	-	-	TWA: 10 mg/m <sup>3</sup> TWA: 50 ppm TWA: 155 mg/m <sup>3</sup>	-
BENZALDEHYDE 100-52-7	-	-	STEL: 4 ppm STEL: 17 mg/m <sup>3</sup>	-

### 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.

**Skin and body protection** Wear suitable protective clothing.

<b>Respiratory protection</b>	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
<b>General hygiene considerations</b>	Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

<b>Physical state</b>	Liquid
<b>Appearance</b>	Liquid
<b>Color</b>	Brown
<b>Odor</b>	Caramel
<b>Odor threshold</b>	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	>104 C. >220 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	1.0425 - 1.0595	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

<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available
<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC content</b>	No information available
<b>Liquid Density</b>	No information available
<b>Bulk density</b>	No information available
<b>Specific Gravity @ 25C</b>	1.0395 - 1.0595
<b>Specific Gravity @ 20C</b>	1.0425 - 1.0625
<b>Refractive Index @ 20C</b>	1.4189 - 1.4389

## 10. Stability and reactivity

<b>Reactivity</b>	No information available.
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	None under normal processing.

**Conditions to avoid** None known based on information supplied.

**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

**Inhalation** May cause irritation of respiratory tract. May cause drowsiness or dizziness.

**Eye contact** Specific test data for the substance or mixture is not available.

**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).

**Ingestion** None known.

### Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** Itching. Rashes. Hives. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

### Acute toxicity

#### Numerical measures of toxicity

#### The following ATE values have been calculated for the mixture

ATEmix (oral) 26,702.30 mg/kg  
ATEmix (dermal) 27,770.40 mg/kg  
ATEmix (inhalation-gas) 99,999.00 ppm  
ATEmix (inhalation-vapor) 99,999.00 mg/L  
ATEmix (inhalation-dust/mist) 99,999.00 mg/L

#### Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
PROPYLENE GLYCOL 57-55-6	20000 mg/kg ( Rat )	20800 mg/kg ( Rabbit )	-
BENZALDEHYDE 100-52-7	1292 mg/kg ( Rat )	1250 mg/kg ( Rabbit )	-

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

**Skin corrosion/irritation** No information available.

**Serious eye damage/eye irritation** No information available.

**Respiratory or skin sensitization** May cause an allergic skin reaction.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

**Reproductive toxicity** No information available.

**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

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
PROPYLENE GLYCOL 57-55-6	19000: 96 h Pseudokirchneriella subcapitata mg/L EC50	51600: 96 h Oncorhynchus mykiss mg/L LC50 static 41 - 47: 96 h Oncorhynchus mykiss mL/L LC50 static 51400: 96 h Pimephales promelas mg/L LC50 static 710: 96 h Pimephales promelas mg/L LC50	-	10000: 24 h Daphnia magna mg/L EC50 1000: 48 h Daphnia magna mg/L EC50 Static
BENZALDEHYDE 100-52-7	-	10.6 - 11.8: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 12.69: 96 h Oncorhynchus mykiss mg/L LC50 static 0.8 - 1.44: 96 h Lepomis macrochirus mg/L LC50 flow-through 6.8 - 8.53: 96 h Pimephales promelas mg/L LC50 flow-through 7.5: 96 h Lepomis macrochirus mg/L LC50 static	-	50: 24 h Daphnia magna mg/L EC50

**Persistence and degradability** No information available.

### Bioaccumulative potential

#### Component Information

Chemical name	Partition coefficient
BENZALDEHYDE	1.48

100-52-7

**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.

**14. Transport information****DOT**

Notes No components found suitable for Technical Name.  
UN number or ID number UN3082  
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
Transport hazard class(es) 9  
Packing group III  
DOT Marine Pollutant NP  
Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III  
Special Provisions 8, 146, 173, 335, 441, IB3, T4, TP1, TP29  
Emergency Response Guide Number 171

**TDG**

Notes No components found suitable for Technical Name.  
UN number or ID number UN3082  
UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
Transport hazard class(es) 9  
Packing group III  
Special Provisions 16, 99  
Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III

**MEX**

Notes No components found suitable for Technical Name.  
UN number or ID number UN3082  
UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
Transport hazard class(es) 9  
Packing group III  
Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III  
Special Provisions 274, 331, 335, 375

**ICAO (air)**

Notes No components found suitable for Technical Name.  
UN number or ID number UN3082  
UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
Transport hazard class(es) 9  
Packing group III  
Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III  
Special Provisions A97, A158, A197, A215

**IATA**



Notes	No components found suitable for Technical Name.
UN number or ID number	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport hazard class(es)	9
Packing group	III
ERG Code	9L
Special Provisions	A97, A158, A197, A215
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III

**IMDG**

Notes	No components found suitable for Technical Name.
UN number or ID number	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport hazard class(es)	9
Packing group	III
EmS-No.	F-A, S-F
Special Provisions	274, 335, 969
Marine pollutant	NP
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, 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	57-55-6	-	Unknown *
Water	7732-18-5	Present	Active
BENZALDEHYDE	100-52-7	-	Unknown *
ACETOIN 96/100% FCC (ACETYL METHYL CARBINOL)	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/NDL	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/NDL** - 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 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.

#### **US State Regulations**

##### **U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
PROPYLENE GLYCOL 57-55-6	X	-	X
Water 7732-18-5	-	-	X
BENZALDEHYDE 100-52-7	X	X	X
ACETOIN 96/100% FCC (ACETYL METHYL CARBINOL) 513-86-0	X	-	-

##### **U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

## **16. Other information**

<b>NFPA</b>	<b>Health hazards</b> 3	<b>Flammability</b> 0	<b>Instability</b> 0	<b>Special hazards</b> -
<b>HMIS</b>	<b>Health hazards</b> 3 *	<b>Flammability</b> 0	<b>Physical hazards</b> 0	<b>Personal protection</b> 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** 31-Jan-2026

**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**