

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 1/5/2024 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Product name : CARAMEL POPCORN FR44323

Product code : FR44323

Market number :

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Perfumes, fragrances Recommended use : Perfumes, fragrances

1.3. Supplier

1.4. Emergency telephone number

Emergency number : 1-800-255-3924; +01-813-248-0585; China:+400-120-0751; Mexico:+01-800-099-0731; Brazil:

+0-800-591-6042; India: +000-800-100-4086

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin sensitisation, Category 1 H317 May cause an allergic skin reaction.

Full text of H-statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning

Hazard statements (GHS US) : H317 - May cause an allergic skin reaction.

Precautionary statements (GHS US) : P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

P272 - Contaminated work clothing must not be allowed out of the workplace.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 - If on skin: Wash with plenty of water.

P321 - Specific treatment (see supplemental first aid instruction on this label). P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

2.3. Other hazards which do not result in classification

No additional information available

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2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | GHS-US classification |
|---|--------------------|------------|--|
| Vanillin | CAS-No.: 121-33-5 | 3 – 6 | Eye Irrit. 2A, H319 |
| Ethyl maltol | CAS-No.: 4940-11-8 | 1.5 – 3 | Acute Tox. 4 (Oral), H302 |
| Ethyl vanillin | CAS-No.: 121-32-4 | 1 – 2 | Acute Tox. 4 (Oral), H302 |
| Butylated hydroxytoluene (BHT) crystals | CAS-No.: 128-37-0 | 0.05 – 0.1 | Acute Tox. 4 (Oral), H302 Skin Sens. 1, H317 Aquatic Chronic 1, H410 |

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice

(show the label where possible).

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Potential adverse human health effects and

symptoms

: Based on available data, the classification criteria are not met.

Symptoms/effects

: Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/effects after inhalation

: May cause an allergic skin reaction.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

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5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer

to section 8: "Exposure controls/personal protection".

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the

product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight.

Storage temperature : 25 °C

Storage area : Store in a well-ventilated place. Store away from heat.

Special rules on packaging : Store in a closed container.

Packaging materials : Do not store in corrodable metal.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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Vanillin (121-33-5)

USA - AIHA - Occupational Exposure Limits

WEEL TWA 10 mg/m³

Ethyl maltol (4940-11-8)

No additional information available

Ethyl vanillin (121-32-4)

No additional information available

Butylated hydroxytoluene (BHT) crystals (128-37-0)

USA - ACGIH - Occupational Exposure Limits

ACGIH OEL TWA 2 mg/m³ (inhalable fraction and vapor)

ACGIH chemical category Not Classifiable as a Human Carcinogen

USA - NIOSH - Occupational Exposure Limits

NIOSH REL TWA 10 mg/m³

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):







Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

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Colour : light yellow amber
Odour : characteristic
Odour threshold : No data available
pH : No data available
Melting point : Not applicable
Freezing point : No data available
Boiling point : No data available

Flash point : > 93.33 °C (closed cup) ASTM D7094

Relative evaporation rate (butylacetate=1) : No data available Flammability : Not applicable. Vapour pressure : No data available Relative vapour density at 20°C : No data available

Relative density : ≈ 0.94

Solubility : No data available Partition coefficient n-octanol/water (Log Pow) : No data available Auto-ignition temperature : No data available Decomposition temperature : No data available Viscosity, kinematic : No data available Viscosity, dynamic No data available **Explosive limits** No data available Explosive properties No data available Oxidising properties No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

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| Vanillin (121-33-5) | |
|---|--|
| LD50 dermal rabbit | > 5010 mg/kg (Source: OECD_SIDS) |
| Ethyl maltol (4940-11-8) | |
| LD50 oral rat | 1150 mg/kg (Source: NLM_CIP) |
| LD50 dermal rabbit | > 5000 mg/kg (Source: ECHA_API) |
| ATE US (oral) | 1150 mg/kg bodyweight |
| Ethyl vanillin (121-32-4) | |
| LD50 oral rat | 1590 mg/kg (Source: NLM_CIP) |
| LD50 dermal rat | > 2000 mg/kg (Source: ECHA_API) |
| ATE US (oral) | 1590 mg/kg bodyweight |
| Butylated hydroxytoluene (BHT) crystals | (128-37-0) |
| LD50 oral rat | > 2930 mg/kg (Source: EPA_HPV) |
| LD50 dermal rat | > 2000 mg/kg (Source: JAPAN_GHS) |
| ATE US (oral) | 500 mg/kg bodyweight |
| Skin corrosion/irritation | : Not classified |
| Serious eye damage/irritation | : Not classified |
| Respiratory or skin sensitisation | : May cause an allergic skin reaction. |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Butylated hydroxytoluene (BHT) crystals | (128-37-0) |
| IARC group | 3 - Not classifiable |
| Reproductive toxicity | : Not classified |
| STOT-single exposure | : Not classified |
| STOT-repeated exposure | : Not classified |
| Aspiration hazard | : Not classified |
| Viscosity, kinematic | : No data available |
| Potential adverse human health effects and symptoms | : Based on available data, the classification criteria are not met. |
| Symptoms/effects | : Not expected to present a significant hazard under anticipated conditions of normal use. |
| Symptoms/effects after inhalation | : May cause an allergic skin reaction. |

SECTION 12: Ecological information

| SECTION 12: Ecological information | |
|------------------------------------|---|
| 12.1. Toxicity | |
| Ecology - general : | The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. |
| Vanillin (121-33-5) | |
| LC50 - Fish [1] | 53 – 61.3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA) |
| LC50 - Fish [2] | 88 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA) |
| NOEC (acute) | 10000 mg/kg (Exposure time: 42 Days - Species: Eisenia foetida [soil dry weight]) |

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| Ethyl maltol (4940-11-8) | |
|---------------------------|--|
| LC50 - Fish [1] | > 85 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss Source: ECHA) |
| Ethyl vanillin (121-32-4) | |
| LC50 - Fish [1] | 81.4 – 94.3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA) |

12.2. Persistence and degradability

| CARAMEL POPCORN FR44323 | |
|-------------------------------|------------------|
| Persistence and degradability | Not established. |

12.3. Bioaccumulative potential

| CARAMEL POPCORN FR44323 | | |
|--|------------------|--|
| Bioaccumulative potential | Not established. | |
| Vanillin (121-33-5) | | |
| Partition coefficient n-octanol/water (Log Pow) | 1.23 (at 22 °C) | |
| Ethyl maltol (4940-11-8) | | |
| Partition coefficient n-octanol/water (Log Pow) | 2.9 (at 25 °C) | |
| Ethyl vanillin (121-32-4) | | |
| Partition coefficient n-octanol/water (Log Pow) | 1.61 (at 25 °C) | |
| Butylated hydroxytoluene (BHT) crystals (128-37-0) | | |
| BCF - Fish [1] | 230 – 2500 | |
| Partition coefficient n-octanol/water (Log Pow) | 5.1 | |

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations : Dispose of contents/container in accordance with local/national laws and regulations. Dispose in

a safe manner in accordance with local/national regulations.

Ecological information : Avoid release to the environment.

SECTION 14: Transport information

14.1. UN number

Not regulated for transport

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14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not applicable

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : Not applicable

14.4. Packing group

Packing group (DOT) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

CANADA

Vanillin (121-33-5)

Listed on the Canadian DSL (Domestic Substances List)

Ethyl maltol (4940-11-8)

Listed on the Canadian DSL (Domestic Substances List)

Ethyl vanillin (121-32-4)

Listed on the Canadian DSL (Domestic Substances List)

Butylated hydroxytoluene (BHT) crystals (128-37-0)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

Vanillin (121-33-5)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Ethyl maltol (4940-11-8)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

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Ethyl vanillin (121-32-4)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Butylated hydroxytoluene (BHT) crystals (128-37-0)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Vanillin (121-33-5)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the Japanese ENCS (Existing New Chemical Substances) inventory

Listed on KECL/KECI (Korean Existing Chemicals Inventory)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the Japanese ISHL (Industrial Safety and Health Law)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on the NCI (Vietnam - National Chemical Inventory)

Listed on Thailand Existing Chemicals Inventory (DIW)

Ethyl maltol (4940-11-8)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the Japanese ENCS (Existing New Chemical Substances) inventory

Listed on KECL/KECI (Korean Existing Chemicals Inventory)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the Japanese ISHL (Industrial Safety and Health Law)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on the NCI (Vietnam - National Chemical Inventory)

Listed on Thailand Existing Chemicals Inventory (DIW)

Ethyl vanillin (121-32-4)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the Japanese ENCS (Existing New Chemical Substances) inventory

Listed on KECL/KECI (Korean Existing Chemicals Inventory)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the Japanese ISHL (Industrial Safety and Health Law)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on the NCI (Vietnam - National Chemical Inventory)

Listed on Thailand Existing Chemicals Inventory (DIW)

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Butylated hydroxytoluene (BHT) crystals (128-37-0)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the Japanese ENCS (Existing New Chemical Substances) inventory

Listed on KECL/KECI (Korean Existing Chemicals Inventory)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Japanese Pollutant Release and Transfer Register Law (PRTR Law)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the Japanese ISHL (Industrial Safety and Health Law)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on the NCI (Vietnam - National Chemical Inventory)

Listed on Thailand Existing Chemicals Inventory (DIW)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

| Component | State or local regulations |
|---|--|
| Bis(2-ethylhexyl) adipate(103-23-1) | U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List; U.S Massachusetts - Right To Know List; U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List |
| Butylated hydroxytoluene (BHT) crystals(128-37-0) | U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List; U.S Massachusetts - Right To Know List |
| benzaldehyde(100-52-7) | U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List; U.S Massachusetts - Right To Know List |
| propionic acid %(79-09-4) | U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List; U.S Massachusetts - Right To Know List; U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List |
| acetic acid %(64-19-7) | U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List; U.S Massachusetts - Right To Know List; U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List |
| Acetoin(513-86-0) | U.S New Jersey - Right to Know Hazardous Substance List |
| benzyl alcohol(100-51-6) | U.S Pennsylvania - RTK (Right to Know) List; U.S Massachusetts - Right To Know List |
| Ethyl butyrate(105-54-4) | U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List; U.S Massachusetts - Right To Know List |

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Other information : None.

| Full text of H-state | Full text of H-statements | |
|----------------------|--------------------------------------|--|
| H302 | Harmful if swallowed. | |
| H317 | May cause an allergic skin reaction. | |

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| Full text of H-statements | |
|---------------------------|---|
| H319 | Causes serious eye irritation. |
| H410 | Very toxic to aquatic life with long lasting effects. |