

Crème Brûlée Type Fragrance

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Issue date: 10/25/2018 Revision date: 08/10/2021 Version: 2.2

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Crème Brûlée Type Fragrance
Product code : 87-05

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Perfume ingredient. Not for use in food or feed.

1.3. Supplier

World of Aromas Inc.
1035 N. Interstate 35E, STE 217, Carrollton, TX
75006
T 469-471-8934
sales@worldofaromas.com - worldofaromas.com

1.4. Emergency telephone number

No additional information available

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Serious eye damage/eye irritation Category 2 H319 Causes serious eye irritation
Skin sensitization, 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 labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Warning

Hazard statements (GHS US) :

May cause an allergic skin reaction
Causes serious eye irritation

Precautionary statements (GHS US) :

Avoid breathing mist, vapors and spray.
Wash hands, forearms and face thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves, protective clothing, eye and face protection
If on skin: Wash with plenty of water.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If skin irritation or rash occurs: Get medical attention.
If eye irritation persists: Get medical attention.
Wash contaminated clothing before reuse.
Dispose of contents and container in accordance with applicable regulations.

2.3. Other hazards which do not result in classification

No additional information available

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
benzyl benzoate	(CAS-No.) 120-51-4	20 – 40	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
3-ethoxy-4-hydroxybenzaldehyde	(CAS-No.) 121-32-4	5 – 20	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Acute 3, H402
Ethyl maltol	(CAS-No.) 4940-11-8	5 – 20	Acute Tox. 4 (Oral), H302
4-methoxybenzaldehyde	(CAS-No.) 123-11-5	< 5	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Aquatic Acute 3, H402 Aquatic Chronic 3, H412

Crème Brûlée Type Fragrance

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Name	Product identifier	%*	GHS US classification
2,6-di-tert-butyl-p-cresol	(CAS-No.) 128-37-0	< 5	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
coumarin	(CAS-No.) 91-64-5	< 5	Acute Tox. 4 (Oral), H302 Skin Sens. 1, H317 STOT RE 2, H373
2,3-butanedione	(CAS-No.) 431-03-8	< 5	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Inhalation:vapour), H331 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335 STOT RE 2, H373 Aquatic Acute 3, H402
Orange terpenes	(CAS-No.) 8028-48-6	< 5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
isovaleraldehyde	(CAS-No.) 590-86-3	< 5	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Acute 2, H401 Aquatic Chronic 2, H411

*Exact concentrations have been withheld as a trade secret

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 : Call a physician immediately.
- 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. Take off contaminated clothing. If skin irritation or rash occurs: Get medical attention.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
- First-aid measures after ingestion : Do not induce vomiting. Call a physician immediately.

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

- Symptoms/effects after skin contact : May cause an allergic skin reaction.
- Symptoms/effects after eye contact : Eye irritation.
- Symptoms/effects after ingestion : Risk of lung edema.

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.

5.2. Specific hazards arising from the chemical

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

5.3. Special protective equipment and precautions for fire-fighters

- 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. Avoid contact with skin and eyes. Avoid breathing mist, vapors and spray.

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".

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.

Crème Brûlée Type Fragrance

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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. Avoid contact with skin and eyes. Avoid breathing mist, vapors and spray. Wear personal protective equipment.
- Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. 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 locked up. Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2,6-di-tert-butyl-p-cresol (128-37-0)

ACGIH	ACGIH TWA (mg/m ³)	2 mg/m ³ (Butylated hydroxytoluene (BHT); USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Inhalable fraction and vapor)
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2,3-butanedione (431-03-8)

ACGIH	ACGIH TWA (ppm)	0.01 ppm (Diacetyl; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
ACGIH	ACGIH STEL (ppm)	0.02 ppm (Diacetyl; USA; Short time value; TLV - Adopted Value)

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

- 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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Color : Colorless to light yellow
- Odor : Characteristic – Crème Brûlée
- Odor threshold : No data available
- pH : No data available
- Melting point : No data available
- Freezing point : No data available
- Boiling point : > 95 °F
- Flash point : > 200 °F
- Relative evaporation rate (butyl acetate=1) : No data available
- Flammability (solid, gas) : Not applicable.
- Vapor pressure : No data available
- Relative vapor density at 20 °C : No data available
- Specific gravity : No data available
- Relative density : No data available
- Solubility : Insoluble in water. Soluble in oil. Soluble in other organic solvents.
- 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
- Explosion limits : No data available
- Explosive properties : No data available
- Oxidizing properties : No data available

Crème Brûlée Type Fragrance

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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

No additional information available

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

benzyl benzoate (120-51-4)	
LD50 oral rat	1870 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Experimental value; >2000 mg/kg bodyweight; Rat)
LD50 dermal rat	4400 mg/kg (Rat)
LD50 dermal rabbit	4000 mg/kg (Rabbit; Experimental value; Modification of Draize 1959 method; >2; Rabbit)
ATE US (oral)	1500 mg/kg body weight
ATE US (dermal)	4000 mg/kg body weight

3-ethoxy-4-hydroxybenzaldehyde (121-32-4)	
LD50 oral rat	1590 mg/kg (Rat)
LD50 dermal rabbit	> 7940 mg/kg (Rabbit)
ATE US (oral)	1590 mg/kg body weight

Ethyl maltol (4940-11-8)	
LD50 oral rat	1150 mg/kg (Rat)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)
ATE US (oral)	1150 mg/kg body weight

2,6-di-tert-butyl-p-cresol (128-37-0)	
LD50 oral rat	890 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Experimental value; >6000 mg/kg bodyweight; Rat)
LD50 dermal rat	> 2000 mg/kg (Rat; Literature study; OECD 402: Acute Dermal Toxicity; >2000 mg/kg bodyweight; Rat; Experimental value)
ATE US (oral)	890 mg/kg body weight

coumarin (91-64-5)	
LD50 oral rat	300 – 900 mg/kg (Rat)
ATE US (oral)	300 mg/kg body weight

2,3-butanedione (431-03-8)	
LD50 oral rat	1580 mg/kg (Rat)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)
LC50 Inhalation - Rat	2.25 mg/kg
ATE US (oral)	1580 mg/kg body weight
ATE US (vapors)	2.25 mg/l/4h
ATE US (dust, mist)	2.25 mg/l/4h

isovaleraldehyde (590-86-3)	
LD50 oral rat	5600 mg/kg (Rat)
LD50 dermal rabbit	2538 mg/kg (Rabbit)
LC50 Inhalation - Rat	43 mg/l/4h (Rat)
ATE US (oral)	5600 mg/kg body weight

Crème Brûlée Type Fragrance

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

isovaleraldehyde (590-86-3)	
ATE US (dermal)	2534 mg/kg body weight
ATE US (vapors)	43 mg/l/4h
ATE US (dust, mist)	43 mg/l/4h

4-methoxybenzaldehyde (123-11-5)	
LD50 oral rat	1510 mg/kg (Rat)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)
ATE US (oral)	1510 mg/kg body weight

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

2,6-di-tert-butyl-p-cresol (128-37-0)	
IARC group	3 - Not classifiable

coumarin (91-64-5)	
IARC group	3 - Not classifiable

Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified

Orange terpenes (8028-48-6)	
STOT-single exposure	May cause respiratory irritation.

2,3-butanedione (431-03-8)	
STOT-single exposure	May cause respiratory irritation.

isovaleraldehyde (590-86-3)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure	: Not classified
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coumarin (91-64-5)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

2,3-butanedione (431-03-8)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after skin contact	: May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.
Symptoms/effects after ingestion	: Risk of lung edema.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
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3-ethoxy-4-hydroxybenzaldehyde (121-32-4)	
LC50 fish 1	87.6 mg/l (LC50; 96 h)

2,6-di-tert-butyl-p-cresol (128-37-0)	
LC50 fish 1	≥ 0.57 mg/l (LC0; EU Method C.1; 96 h; Brachydanio rerio; Semi-static system; Fresh water; Experimental value)
EC50 Daphnia 1	0.48 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
LC50 fish 2	0.199 mg/l (LC50; ECOSAR v1.00; 96 h; Pisces)
EC50 Daphnia 2	0.15 mg/l (NOEC; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)

coumarin (91-64-5)	
LC50 fish 1	56 mg/l (LC50; 96 h)
EC50 Daphnia 1	135 mg/l (EC50; 48 h)

Crème Brûlée Type Fragrance

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

isovaleraldehyde (590-86-3)	
LC50 fish 1	3.25 mg/l (LC50; 96 h; Pimephales promelas)
EC50 Daphnia 1	177 mg/l (EC50; 48 h)
Threshold limit algae 1	80 mg/l (EC50; 72 h)
4-methoxybenzaldehyde (123-11-5)	
LC50 fish 1	220 mg/l (LC50; 96 h)
EC50 Daphnia 1	83 mg/l (EC50; 48 h)
Threshold limit algae 1	43 mg/l (EC50; 72 h)
12.2. Persistence and degradability	
benzyl benzoate (120-51-4)	
Persistence and degradability	Readily biodegradable in water. Low potential for mobility in soil.
3-ethoxy-4-hydroxybenzaldehyde (121-32-4)	
Persistence and degradability	Readily biodegradable in water. Forming sediments in water. Photodegradation in the air.
ThOD	1.81 g O ₂ /g substance
BOD (% of ThOD)	0.529 (5 days; Literature study)
Orange terpenes (8028-48-6)	
Persistence and degradability	Biodegradability in water: no data available.
Ethyl maltol (4940-11-8)	
Persistence and degradability	Biodegradability in water: no data available.
2,6-di-tert-butyl-p-cresol (128-37-0)	
Persistence and degradability	Not readily biodegradable in water. Biodegradable in the soil. Adsorbs into the soil. Low potential for mobility in soil. Photooxidation in the air.
Biochemical oxygen demand (BOD)	0.51 g O ₂ /g substance
Chemical oxygen demand (COD)	2.27 g O ₂ /g substance
ThOD	2.977 g O ₂ /g substance
BOD (% of ThOD)	0.17
coumarin (91-64-5)	
Persistence and degradability	Readily biodegradable in water. Photolysis in the air.
2,3-butanedione (431-03-8)	
Persistence and degradability	Biodegradability in water: no data available.
ThOD	1.67247 g O ₂ /g substance
isovaleraldehyde (590-86-3)	
Persistence and degradability	Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.423 g O ₂ /g substance
Chemical oxygen demand (COD)	1.908 g O ₂ /g substance
4-methoxybenzaldehyde (123-11-5)	
Persistence and degradability	Readily biodegradable in water.
12.3. Bioaccumulative potential	
benzyl benzoate (120-51-4)	
BCF fish 1	2286 (BCF; BCFBAF v3.00; Pisces)
Partition coefficient n-octanol/water (Log Pow)	3.88 – 4
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
3-ethoxy-4-hydroxybenzaldehyde (121-32-4)	
Partition coefficient n-octanol/water (Log Pow)	1.61 – 1.88
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Orange terpenes (8028-48-6)	
Bioaccumulative potential	No bioaccumulation data available.
Ethyl maltol (4940-11-8)	
Bioaccumulative potential	No bioaccumulation data available.
2,6-di-tert-butyl-p-cresol (128-37-0)	
BCF fish 1	230 – 2500 (BCF; OECD 305: Bioconcentration: Flow-Through Fish Test; 56 days; Cyprinus carpio; Flow-through system; Fresh water; Experimental value)
Partition coefficient n-octanol/water (Log Pow)	5.1 (Experimental value)

Crème Brûlée Type Fragrance

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2,6-di-tert-butyl-p-cresol (128-37-0)	
Bioaccumulative potential	Potential for bioaccumulation ($500 \leq \text{BCF} \leq 5000$).
coumarin (91-64-5)	
BCF fish 1	< 10 (BCF; 72 h)
BCF other aquatic organisms 1	42 (BCF; 24 h; Chlorella sp.)
Partition coefficient n-octanol/water (Log Pow)	1.39
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
2,3-butanedione (431-03-8)	
Bioaccumulative potential	No bioaccumulation data available.
isovaleraldehyde (590-86-3)	
Partition coefficient n-octanol/water (Log Pow)	1.31 (OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
4-methoxybenzaldehyde (123-11-5)	
Partition coefficient n-octanol/water (Log Pow)	1.5
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

benzyl benzoate (120-51-4)	
Surface tension	0.027 N/m (210 °C)
Partition coefficient n-octanol/water (Log Koc)	log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC); 3,8; Experimental value
2,6-di-tert-butyl-p-cresol (128-37-0)	
Partition coefficient n-octanol/water (Log Koc)	Koc, PCKOCWIN v1.66; 23030; Calculated value; log Koc; PCKOCWIN v1.66; 4.362; Calculated value
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.
isovaleraldehyde (590-86-3)	
Surface tension	0.023 N/m (20 °C)

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

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

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT : Non-hazardous; not regulated.

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed as Active, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

No additional information available

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
2,6-di-tert-butyl-p-cresol(128-37-0)	U.S. - New Jersey - Right to Know Hazardous Substance List
2,3-butanedione(431-03-8)	U.S. - New Jersey - Right to Know Hazardous Substance List
isovaleraldehyde(590-86-3)	U.S. - New Jersey - Right to Know Hazardous Substance List

Crème Brûlée Type Fragrance

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 16: Other information

Revision date : 08/10/2021

Full text of H-phrases:

H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor.
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H331	Toxic if inhaled
H335	May cause respiratory irritation
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.