

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 09.03.2020

Version 67

Revision: 09.03.2020

. SECTION 1: Identification of the substance/mixture and of the company/undertaking

◊ **1.1 Product identifier**

◊ Trade name: **Chocolate Flavour**

◊ Article number: P0610483

◊ Registration number -

◊ **1.2 Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.

◊ Application of the substance / the mixture Flavour/Fragrance

◊ **1.3 Details of the supplier of the safety data sheet**

◊ Manufacturer/Supplier:

Frey & Lau GmbH

Immenhacken 12, D-24558 Henstedt-Ulzburg

Tel:++49-4193-9953 Fax: +49-4193-9955-80

◊ Further information obtainable from:

Sachkundige Person Frey + Lau

info@freylau.com

◊ **1.4 Emergency telephone number:** ++49-40-54.77.99.56 WAKO

. SECTION 2: Hazards identification

◊ **2.1 Classification of the substance or mixture**

◊ Classification according to Regulation (EC) No 1272/2008

Eye Irrit. 2 H319 Causes serious eye irritation.

◊ **2.2 Label elements**

◊ Labelling according to Regulation (EC) No 1272/2008 The product is classified and labelled according to the CLP regulation.

◊ Hazard pictograms



GHS07

◊ Signal word Warning

◊ Hazard statements

H319 Causes serious eye irritation.

◊ Precautionary statements

P264 Wash thoroughly after handling.

P280 Wear eye protection / face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

◊ Additional information:

EUH208 Contains 3-Methylbutyraldehyde, 5-Methyl-2-phenyl-2-hexenal, 2,3-Butanedione. May produce an allergic reaction.

◊ **2.3 Other hazards**

◊ Results of PBT and vPvB assessment

◊ PBT: Not applicable.

◊ vPvB: Not applicable.

. SECTION 3: Composition/information on ingredients

◊ **3.2 Chemical characterisation: Mixtures**

◊ Description: Mixture of substances listed below with nonhazardous additions.

◊ Dangerous components:

CAS: 121-33-5 4-Hydroxy-3-Methoxybenzaldehyde

>20-25%

EINECS: 204-465-2 Eye Irrit. 2, H319

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CAS: 513-86-0	3-Hydroxy-2-butanone	(Contd. of page 1)
EINECS: 208-174-1	Flam. Liq. 3, H226; STOT RE 2, H373; Eye Dam. 1, H318	1-2,5%
CAS: 590-86-3	3-Methylbutyraldehyde	≥0,25-<1%
EINECS: 209-691-5	Flam. Liq. 2, H225; Aquatic Chronic 2, H411; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	
CAS: 21834-92-4	5-Methyl-2-phenyl-2-hexenal	≥0,1-<1%
EINECS: 244-602-3	Skin Sens. 1B, H317	
CAS: 431-03-8	2,3-Butanedione	≥0,1-<1%
EINECS: 207-069-8	Flam. Liq. 2, H225; Acute Tox. 3, H331; STOT RE 2, H373; Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1, H317	

◊ **Additional information:** For the wording of the listed hazard phrases refer to section 16.

. SECTION 4: First aid measures

- ◊ **4.1 Description of first aid measures**
- ◊ **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- ◊ **After skin contact:** Generally the product does not irritate the skin.
- ◊ **After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- ◊ **After swallowing:** If symptoms persist consult doctor.
- ◊ **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- ◊ **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

. SECTION 5: Firefighting measures

- ◊ **5.1 Extinguishing media**
- ◊ **Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.
- ◊ **For safety reasons unsuitable extinguishing agents:** Water with full jet
- ◊ **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- ◊ **5.3 Advice for firefighters**
- ◊ **Protective equipment:** No special measures required.

. SECTION 6: Accidental release measures

- ◊ **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- ◊ **6.2 Environmental precautions:**
- Dilute with plenty of water.
- Do not allow to enter sewers/ surface or ground water.
- ◊ **6.3 Methods and material for containment and cleaning up:**
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Dispose contaminated material as waste according to item 13.
- Ensure adequate ventilation.
- ◊ **6.4 Reference to other sections**
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.

. SECTION 7: Handling and storage

- ◊ **7.1 Precautions for safe handling**
- Ensure good ventilation/exhaustion at the workplace.
- No special precautions are necessary if used correctly.
- ◊ **Information about fire - and explosion protection:** No special measures required.

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- ◊ **7.2 Conditions for safe storage, including any incompatibilities**
- ◊ Storage:
- ◊ Requirements to be met by storerooms and receptacles: No special requirements.
- ◊ Information about storage in one common storage facility: Not required.
- ◊ Further information about storage conditions: Keep container tightly sealed.
- ◊ Storage class: 10
- ◊ **7.3 Specific end use(s)** No further relevant information available.

. SECTION 8: Exposure controls/personal protection

- ◊ Additional information about design of technical facilities: No further data; see item 7.
- ◊ **8.1 Control parameters**
- ◊ Ingredients with limit values that require monitoring at the workplace:
431-03-8 2,3-Butanedione
TWA Short-term value: 0,36 mg/m³, 0,1 ppm
Long-term value: 0,07 mg/m³, 0,02 ppm
- ◊ Additional information: The lists valid during the making were used as basis.
- ◊ **8.2 Exposure controls**
- ◊ Personal protective equipment:
- ◊ General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
- ◊ Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.
- ◊ Protection of hands:
Protective gloves
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- ◊ Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
The multichemical-resistant glove Barrier 02-100 is recommended.
- ◊ Penetration time of glove material
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- ◊ Eye protection:
Safety glasses
Tightly sealed goggles

. SECTION 9: Physical and chemical properties

- ◊ **9.1 Information on basic physical and chemical properties**
- ◊ General Information
- ◊ Appearance:
Form: Fluid
Colour: Brown
- ◊ Odour: Characteristic
- ◊ Odour threshold: Not determined.
- ◊ pH-value: Not determined.
- ◊ Melting point/freezing point: Undetermined.
- ◊ Flash point: 73 °C

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- ◊ **Flammability (solid, gas):** Not applicable.
- ◊ **Decomposition temperature:** Not determined.
- ◊ **Auto-ignition temperature:** Not determined.
- ◊ **Explosive properties:** Not determined.
- ◊ **Explosion limits:**
 - Lower: Not determined.
 - Upper: Not determined.
- ◊ **Density at 20 °C:** 1,074 g/cm³
- ◊ **Relative density:** Not determined.
- ◊ **Vapour density:** Not determined.
- ◊ **Evaporation rate:** Not determined.
- ◊ **Solubility in / Miscibility with water:** Soluble.
- ◊ **Partition coefficient: n-octanol/water:** Not determined.
- ◊ **VOC (EC):** 77,34 %
- ◊ **9.2 Other information:** No further relevant information available.

. SECTION 10: Stability and reactivity

- ◊ **10.1 Reactivity:** No further relevant information available.
- ◊ **10.2 Chemical stability:**
 - ◊ **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- ◊ **10.3 Possibility of hazardous reactions:** No dangerous reactions known.
- ◊ **10.4 Conditions to avoid:** No further relevant information available.
- ◊ **10.5 Incompatible materials:** No further relevant information available.
- ◊ **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

. SECTION 11: Toxicological information

- ◊ **11.1 Information on toxicological effects:**
 - ◊ **Acute toxicity:** Based on available data, the classification criteria are not met.
 - ◊ **LD/LC50 values relevant for classification:**

ATE (Acute Toxicity Estimates)
Inhalative LC50 3.000 mg/l
 - ◊ **Primary irritant effect:**
 - ◊ **Skin corrosion/irritation:** Based on available data, the classification criteria are not met.
 - ◊ **Serious eye damage/irritation:** Causes serious eye irritation.
 - ◊ **Respiratory or skin sensitisation:** Based on available data, the classification criteria are not met.
 - ◊ **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):**
 - ◊ **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
 - ◊ **Carcinogenicity:** Based on available data, the classification criteria are not met.
 - ◊ **Reproductive toxicity:** Based on available data, the classification criteria are not met.
 - ◊ **STOT-single exposure:** Based on available data, the classification criteria are not met.
 - ◊ **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
 - ◊ **Aspiration hazard:** Based on available data, the classification criteria are not met.

. SECTION 12: Ecological information

- ◊ **12.1 Toxicity:**
 - ◊ **Aquatic toxicity:** No further relevant information available.

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- ◊ **12.2 Persistence and degradability** No further relevant information available.
- ◊ **12.3 Bioaccumulative potential** No further relevant information available.
- ◊ **12.4 Mobility in soil** No further relevant information available.
- ◊ **Ecotoxicological effects:**
- ◊ **Remark:** Harmless to fish up to the tested concentration
- ◊ **Additional ecological information:**
- ◊ **General notes:**
 Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
 Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- ◊ **12.5 Results of PBT and vPvB assessment**
- ◊ **PBT:** Not applicable.
- ◊ **vPvB:** Not applicable.
- ◊ **12.6 Other adverse effects** No further relevant information available.

. SECTION 13: Disposal considerations

- ◊ **13.1 Waste treatment methods**
- ◊ **Recommendation** Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- ◊ **Uncleaned packaging:**
- ◊ **Recommendation:** Disposal must be made according to official regulations.
- ◊ **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

. SECTION 14: Transport information

- ◊ **14.1 UN-Number**
- ◊ ADR, ADN, IMDG, IATA
- ◊ **14.2 UN proper shipping name**
- ◊ ADR, ADN, IMDG, IATA
- ◊ **14.3 Transport hazard class(es)**
- ◊ ADR, ADN, IMDG, IATA
- ◊ **Class**
- ◊ **14.4 Packing group**
- ◊ ADR, IMDG, IATA
- ◊ **14.5 Environmental hazards:**
- ◊ **Marine pollutant:**
- ◊ **14.6 Special precautions for user**
- ◊ **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**
- ◊ UN "Model Regulation":

Void

Void

Void

Void

No

Not applicable.

Not applicable.

Void

. SECTION 15: Regulatory information

- ◊ **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- ◊ **Labelling according to Regulation (EC) No 1272/2008** The product is classified and labelled according to the CLP regulation.
- ◊ **Hazard pictograms**



GHS07

- ◊ **Signal word** Warning
- ◊ **Hazard statements**
 H319 Causes serious eye irritation.
- ◊ **Precautionary statements**
 P264 Wash thoroughly after handling.

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- P280 Wear eye protection / face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
- ◊ Directive 2012/18/EU
 - ◊ Named dangerous substances - ANNEX I None of the ingredients is listed.
 - ◊ REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
 - ◊ **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

. SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- ◊ Relevant phrases
 - H225 Highly flammable liquid and vapour.
 - H226 Flammable liquid and vapour.
 - H302 Harmful if swallowed.
 - H315 Causes skin irritation.
 - H317 May cause an allergic skin reaction.
 - H318 Causes serious eye damage.
 - 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.
 - H411 Toxic to aquatic life with long lasting effects.
- ◊ Department issuing SDS: Regulatory Affairs
- ◊ Contact: Dr. Maja Zippel
- ◊ Abbreviations and acronyms:
 - RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 - ICAO: International Civil Aviation Organisation
 - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 - IMDG: International Maritime Code for Dangerous Goods
 - IATA: International Air Transport Association
 - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 - EINECS: European Inventory of Existing Commercial Chemical Substances
 - ELINCS: European List of Notified Chemical Substances
 - CAS: Chemical Abstracts Service (division of the American Chemical Society)
 - VOC: Volatile Organic Compounds (USA, EU)
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
 - PBT: Persistent, Bioaccumulative and Toxic
 - vPvB: very Persistent and very Bioaccumulative
 - Flam. Liq. 2: Flammable liquids – Category 2
 - Flam. Liq. 3: Flammable liquids – Category 3
 - Acute Tox. 4: Acute toxicity - oral – Category 4
 - Acute Tox. 3: Acute toxicity - inhalation – Category 3
 - Skin Irrit. 2: Skin corrosion/irritation – Category 2
 - Eye Dam. 1: Serious eye damage/eye irritation – Category 1
 - Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
 - Skin Sens. 1: Skin sensitisation – Category 1
 - Skin Sens. 1B: Skin sensitisation – Category 1B
 - STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
 - STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
 - Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2