

Safety Data Sheet

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

Issue date: 08/01/2018 Revision date: 04/24/2024 Supersedes: 10/23/2023

SECTION 1: Identification

1.1. Identification

Product form : Substance

Product name : CASSIA EXTRA REDISTILLED OIL

CAS-No. : 104-55-2
Product code : 50-6060-03
Formula : C9H8O

Synonyms : 2-Propenal, 3-phenyl-/ 3-phenyl-2-propenal / 3-phenyl-2-propenaldehyde / 3-phenylacrolein /

3-phenylpropenal / ABION CA / acrolein, 3-phenyl- / benzylideneacetaldehyde / beta-

phenylacrolein / beta-phenylcrolein / cassia aldehyde / cinnamaldehyde / cinnamic aldehyde / cinnamic aldehyde / cinnamyl aldehyde / FEMA NUMBER 2286 / phenylacrolein / zimtaldehyde

Version: 1.6

BIG No : 11158

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Odorant

Cosmetic product: raw material

Odorant: component

1.3. Supplier

The Lebermuth Company 4004 Technology Drive South Bend, IN 46628 - United States T 574-259-7000 - F 574-258-7450 info@lebermuth.com - www.lebermuth.com

1.4. Emergency telephone number

Emergency number : CHEMTREC - USA: 800-424-9300 International: +1 703-527-3887 / 1-800-424-9300

CCN 13010

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Acute toxicity (dermal) Category 4 Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2A

Skin sensitization, category 1A

Harmful in contact with skin Causes skin irritation Causes serious eye irritation May cause an allergic skin reaction

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)



GHS07

Signal word (GHS US) : Warning

Hazard statements (GHS US) : Harmful in contact with skin

Causes skin irritation

May cause an allergic skin reaction Causes serious eye irritation

Precautionary statements (GHS US) : Avoid breathing dust/fume/gas/mist/vapors/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 protection/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.

Call a poison center or doctor if you feel unwell.

Specific treatment (see supplemental first aid instruction on this label).

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Specific treatment (see supplemental first aid instruction on this label)

If skin irritation occurs: Get medical advice/attention.
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.

Wash contaminated clothing before reuse.

Dispose of contents/container to hazardous or special waste collection point, in accordance

with local, regional, national and/or international regulation.

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

| Name | Product identifier | % | GHS US classification |
|----------------|--------------------|-----|--|
| CINNAMALDEHYDE | (CAS-No.) 104-55-2 | 100 | Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1A, H317 |

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

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures

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

Symptoms/effects after inhalation : EXPOSURE TO HIGH CONCENTRATIONS: Dry/sore throat. Coughing.

Symptoms/effects after ingestion : Nausea. Abdominal pain. Vomiting. Irritation of the gastric/intestinal mucosa.

Chronic symptoms : Red skin. Swelling of the skin. Skin rash/inflammation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Unsuitable extinguishing media : Water (quick-acting extinguisher, reel); risk of puddle expansion. Water; risk of puddle

expansion.

5.2. Specific hazards arising from the chemical

Fire hazard : DIRECT FIRE HAZARD: Combustible. INDIRECT FIRE HAZARD: Temperature above

flashpoint: higher fire/explosion hazard. Reactions involving a fire hazard: see "Reactivity

Hazard".

Explosion hazard : INDIRECT EXPLOSION HAZARD: Reactions with explosion hazards: see "Reactivity Hazard".

Reactivity : Reacts slowly on exposure to air: peroxidation resulting in increased fire or explosion risk.

Oxidizes slowly on exposure to light. Reacts with combustible materials: (increased) risk of fire. Reacts violently with (strong) oxidizers: (increased) risk of fire/explosion. Reacts violently on

exposure to temperature rise with (some) acids/bases.

5.3. Special protective equipment and precautions for fire-fighters

Precautionary measures fire : Exposure to fire/heat: keep upwind. Exposure to fire/heat: have neighbourhood close doors and

windows.

Firefighting instructions : Cool tanks/drums with water spray/remove them into safety.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Gloves (EN 374). Face shield (EN 166). Protective clothing (EN 14605 or EN 13034).

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6.1.2. For emergency responders

6.2. Environmental precautions

No additional information available

6.3. Methods and material for containment and cleaning up

For containment : Contain released product, collect/pump into suitable containers. Plug the leak, cut off the

supply.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

7.2. Conditions for safe storage, including any incompatibilities

Heat-ignition : KEEP SUBSTANCE AWAY FROM: heat sources.

Information on mixed storage : KEEP SUBSTANCE AWAY FROM: combustible materials. oxidizing agents. (strong) bases.

(strong) acids

Storage area : Store in a cool area. Store in a dark area. Keep container in a well-ventilated place. Provide for

a tub to collect spills. Keep only in the original container. Store only in a stabilised state. May be stored under argon. May be stored under nitrogen. Keep out of direct sunlight. Meet the legal

requirements.

Special rules on packaging : SPECIAL REQUIREMENTS: hermetical. clean. opaque. correctly labelled. meet the legal

requirements. Secure fragile packagings in solid containers.

Packaging materials : SUITABLE MATERIAL: glass. MATERIAL TO AVOID: aluminium. iron. synthetic material.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

CINNAMALDEHYDE (104-55-2)

No additional information available

8.2. Appropriate engineering controls

8.3. Individual protection measures/Personal protective equipment

Materials for protective clothing:

Good resistance: butyl rubber

Hand protection:

Gloves

Skin and body protection:

Protective clothing

Respiratory protection:

High gas/vapour concentration: full face mask with filter type A





SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

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Appearance Liquid

: YELLOW LIQUID Color

Odor CHARACTERISTIC ODOR AND TASTE OF CINNAMON/CASSIA

Odor threshold : No data available

: 4.7 (1 %, 30 °C, OECD 122: Partition Coefficient (n-Octanol/Water), pH-Metric Method for nΗ

Ionisable Substances)

: -7.5 °C Melting point

Freezing point : No data available

: > 250 °C (970 hPa, OECD 103: Boiling Point) Boiling point

Flash point

Relative evaporation rate (butyl acetate=1) : No data available Flammability : Not applicable. Vapor pressure : 0.039 hPa (25 °C)

Relative vapor density at 20°C : 4.6

Relative density 1.054 (1.042 - 1.058)

Relative density of saturated gas/air mixture

1041 kg/m3 (20 °C, OECD 109: Density of Liquids and Solids) Density

Molecular mass 132.16 g/mol Insoluble. Solubility Water: 1 g/100ml

Ethanol: 0.4 g/100ml (27 °C)

Ether: 0.3 g/100ml (27 °C)

Partition coefficient n-octanol/water (Log Pow) 2.107 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method,

25 °C)

: No data available in the literature Auto-ignition temperature

Decomposition temperature : 252 °C

Viscosity, kinematic : 21.25 mm²/s (20 °C, OECD 114: Viscosity of Liquids) : 22.12 mPa·s (20 °C, OECD 114: Viscosity of Liquids) Viscosity, dynamic

: No data available **Explosion limits** Explosive properties : No data available Oxidizing properties : No data available

Other information 9.2.

: 0 % VOC content

Refractive index : 1.618 (1.61 - 1.626)

Other properties : Gas/vapour heavier than air at 20°C. Slightly volatile.

SECTION 10: Stability and reactivity

Reactivity

Reacts slowly on exposure to air: peroxidation resulting in increased fire or explosion risk. Oxidizes slowly on exposure to light. Reacts with combustible materials: (increased) risk of fire. Reacts violently with (strong) oxidizers: (increased) risk of fire/explosion. Reacts violently on exposure to temperature rise with (some) acids/bases.

Chemical stability

Unstable on exposure to air. Unstable on exposure to light.

Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

Conditions to avoid

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

Incompatible materials

No additional information available

Hazardous decomposition products

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

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|------|---------------------------|-----------------|
| 1.1. | | logical effects |
| | | |

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Harmful in contact with skin.

Acute toxicity (inhalation) : Not classified

| CINNAMALDEHYDE (104-55-2) | |
|---------------------------|--|
| LD50 oral rat | 2220 mg/kg (Rat, Oral) |
| LD50 dermal rabbit | 1260 ml/kg (24 h, Rabbit, Male / female, Experimental value, Dermal) |
| LC50 Inhalation - Rat | 68.88 mg/l (4 h, Rat, Male / female, QSAR, Inhalation) |
| ATE US (oral) | 2200 mg/kg body weight |
| ATE US (dermal) | 1100 mg/kg body weight |
| ATE US (vapors) | 68.88 mg/l/4h |
| ATE US (dust, mist) | 68.88 mg/l/4h |

Skin corrosion/irritation : Causes skin irritation.

pH: 4.7 (1 %, 30 °C, OECD 122: Partition Coefficient (n-Octanol/Water), pH-Metric Method for

Ionisable Substances)

Serious eye damage/irritation : Causes serious eye irritation.

pH: 4.7 (1 %, 30 °C, OECD 122: Partition Coefficient (n-Octanol/Water), pH-Metric Method for

Ionisable Substances)

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

Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified

STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

Viscosity, kinematic : 21.25 mm²/s (20 °C, OECD 114: Viscosity of Liquids)

Potential Adverse human health effects and

symptoms

: Practically non-toxic if swallowed (LD50 oral, rat > 2000 mg/kg). Causes skin irritation. Harmful

in contact with skin. Causes serious eye irritation.

Symptoms/effects after inhalation : EXPOSURE TO HIGH CONCENTRATIONS: Dry/sore throat. Coughing.

Symptoms/effects after ingestion : Nausea. Abdominal pain. Vomiting. Irritation of the gastric/intestinal mucosa.

Chronic symptoms : Red skin. Swelling of the skin. Skin rash/inflammation.

SECTION 12: Ecological information

| SECTION IE. Ecological information | | | |
|------------------------------------|---|--|--|
| 12.1. Toxicity | | | |
| Ecology - general | : Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008. | | |
| Ecology - air | : Not included in the list of substances which may contribute to the greenhouse effect (IPCC). Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014). Photooxidation in the air. Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009). | | |
| Ecology - water | : Toxic to crustacea. Toxic to fishes. Inhibition of activated sludge. Harmful to algae. Hydrolysis in water. | | |
| CINNAMALDEHYDE (104-55-2) | | | |
| LC50 - Fish [1] | 4.15 mg/l (EU Method C.1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP) | | |
| EC50 - Crustacea [1] | 3.21 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect) | | |

12.2. Persistence and degradability

| CINNAMALDEHYDE (104-55-2) | |
|-------------------------------|---------------------------------|
| Persistence and degradability | Readily biodegradable in water. |

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12.3. Bioaccumulative potential

| CINNAMALDEHYDE (104-55-2) | | |
|---|---|--|
| Partition coefficient n-octanol/water (Log Pow) | 2.107 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C) | |
| Bioaccumulative potential | Low potential for bioaccumulation (Log Kow < 4). | |

12.4. Mobility in soil

| CINNAMALDEHYDE (104-55-2) | | |
|---|--|--|
| Surface tension | 45.3 mN/m (20 °C, Experimental value) | |
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 1.958 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value) | |
| Ecology - soil | Highly mobile in soil. | |

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations

: Do not discharge into drains or the environment. Dispose of at authorized waste collection point. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals.

Additional information

Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

Transportation of Dangerous Goods

Not regulated

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Transport by sea

Not regulated

Air transport

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

CINNAMALDEHYDE (104-55-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

CINNAMALDEHYDE (104-55-2)

Listed on the Canadian DSL (Domestic Substances List)

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EU-Regulations

No additional information available

National 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

temporary incapacitation or residual injury.

NFPA fire hazard

1 - Materials that must be preheated before ignition can occur.

NFPA reactivity

2 - Materials that, united emergency conditions, can cause temporary incapacitation or residual injury.

1 - Materials that must be preheated before ignition can occur.

under fire conditions.



SDS US (GHS HazCom 2012) - Lebermuth

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.

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