

Safety Data Sheet

according to Regulation (EU) 2015/830 Issue date: 9/26/2023 Revision date: 11/29/2023 Supersedes version of: 9/26/2023 Version: 1.3

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

1.1. Product identifier

Product form : Substance

Product name : CASSIA EXTRA REDISTILLED OIL

 EC-No.
 : 203-213-9

 CAS-No.
 : 104-55-2

 Product code
 : 50-6060-03

 Type of product
 : Pure substance

Formula : C9H8O

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

 $/\ 3-phenylpropenal\ /\ ABION\ CA\ /\ acrolein,\ 3-phenyl-\ /\ benzylideneacetaldehyde\ /\ beta-phenylcrolein\ /\ cassia\ aldehyde\ /\ cinnamaldehyde\ /\ cinnamic\ aldehyde\ /$

/ cinnammaldehyde / cinnamyl aldehyde / FEMA NUMBER 2286 / phenylacrolein /

zimtaldehyde Trade product

Product group : Trade | BIG No : 11158

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/mixture : Odorant

Cosmetic product: raw material

Odorant: component

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

The Lebermuth Company
4004 Technology Drive
46628 South Bend, IN
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: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (dermal), Category 4 H312
Skin corrosion/irritation, Category 2 H315
Serious eye damage/eye irritation, Category 2 H319
Skin sensitisation, category 1A H317
Hazardous to the aquatic environment – Acute Hazard, Category 1 H400
Hazardous to the aquatic environment – Chronic Hazard, Category 3 H412

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

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2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)

Precautionary statements (CLP)



GHS07

GHS09

Signal word (CLP) : Warning

Hazard statements (CLP) : H312 - Harmful in contact with skin.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

H410 - Very toxic to aquatic life with long lasting effects.

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 - Wash hands, forearms and face thoroughly after handling.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

P302+P352 - IF ON SKIN: Wash with plenty of water.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. P312 - Call a POISON CENTRE or doctor if you feel unwell.

P321 - Specific treatment (see supplemental first aid instruction on this label).

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse.

P391 - Collect spillage.

P501 - 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

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent
Custom name : CINNAMALDEHYDE

CAS-No. : 104-55-2 EC-No. : 203-213-9

Name	Product identifier	%
CINNAMALDEHYDE	CAS-No.: 104-55-2 EC-No.: 203-213-9	100

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

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

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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 advice/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 advice/attention.

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

4.2. Most important symptoms and effects, both acute and delayed

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

Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Eye irritation.

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. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

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

expansion.

5.2. Special hazards arising from the substance or mixture

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".

Hazardous decomposition products in case of fire : Upon combustion: CO and CO2 are formed.

5.3. Advice for firefighters

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.

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

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

Emergency procedures : Ventilate spillage area. Avoid contact with skin, eyes and clothing. Avoid breathing

dust/fume/gas/mist/vapours/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

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

supply. Collect spillage.

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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. Do not get in eyes, on skin, or on clothing. Wear

personal protective equipment. Avoid breathing dust/fume/gas/mist/vapours/spray.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be

allowed out of the workplace. 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.

Heat and ignition sources : 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.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

CINNAMALDEHYDE (104-55-2)		
DNEL/DMEL (Workers)		
Long-term - systemic effects, dermal 3.85 mg/kg bw/day		
Long-term - systemic effects, inhalation 13.6 mg/m³		
DNEL/DMEL (General population)		
Long-term - systemic effects,oral 1.37 mg/kg bw/day		
Long-term - systemic effects, inhalation	2.4 mg/m³	
Long-term - systemic effects, dermal	1.37 mg/kg bw/day	

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CINNAMALDEHYDE (104-55-2)	
PNEC (Water)	
PNEC aqua (freshwater)	0.021 mg/l
PNEC aqua (marine water)	0.002 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.021 mg/kg dwt
PNEC sediment (marine water)	0.002 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.004 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	7.1 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Protective clothing

Hand protection:

Gloves

Other skin protection

Materials for protective clothing:

GIVE GOOD RESISTANCE: butyl rubber

8.2.2.3. Respiratory protection

Respiratory protection:

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

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Liquid.
Molecular mass : 132.16 g/mol

Colour : Colourless to light yellow.
Odour : Cinnamon odour.
Odour threshold : No data available

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

Ionisable Substances)

Relative evaporation rate (butylacetate=1) : No data available

Melting point : -7.5 °C

Freezing point : No data available

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

Flash point : 93.3 °C

Auto-ignition temperature : No data available in the literature

Decomposition temperature : 252 °C
Flammability (solid, gas) : Not applicable
Vapour pressure : 0.039 hPa (25 °C)

Relative vapour density at 20°C : 4.6

Relative density : 1.054 (1.042 – 1.058)

Relative density of saturated gas/air mixture : 1

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

Solubility : Insoluble.

Water: 1 g/100ml (27 °C) 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)

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

Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available
Particle size : Not applicable (liquid)

9.2. Other information

VOC content : 0 %

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

10.1. 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.

10.2. Chemical stability

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

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).

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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

 Not classified Acute toxicity (oral)

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

Acute toxicity (inhalation) Not classified

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

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 sensitisation 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

CINNAMALDEHYDE (104-55-2)

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

Potential adverse human health effects and : Practically non-toxic if swallowed (LD50 oral, rat > 2000 mg/kg), Causes skin

symptoms irritation, Harmful in contact with skin, Causes serious eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008. Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

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.

Very toxic to aquatic life.

Hazardous to the aquatic environment, short-term

(acute)

Hazardous to the aquatic environment, long-term

(chronic)

: Harmful to aquatic life with long lasting effects.

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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)
EC50 72h - Algae [1]	31.6 mg/l (OECD 201: Alga, Growth Inhibition Test, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Growth rate)

12.2. Persistence and degradability

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

12.3. Bioaccumulative potential

CINNAMALDEHYDE (104-55-2)	
(3 /	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. Results of PBT and vPvB assessment

CINNAMALDEHYDE (104-55-2)

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment 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 was

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.

European List of Waste (LoW) code : 15 01 10* - packaging containing residues of or contaminated by dangerous substances 07 06 04* - other organic solvents, washing liquids and mother liquors

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SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1 UN number

UN-No. (ADR) : UN 3082 UN-No. (IMDG) : UN 3082 UN-No. (IATA) : UN 3082 UN-No. (ADN) : UN 3082 UN-No. (RID) UN 3082

14.2. UN proper shipping name

Proper Shipping Name (ADR) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CINNAMALDEHYDE) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CINNAMALDEHYDE) Proper Shipping Name (IMDG)

Proper Shipping Name (IATA) : Environmentally hazardous substance, liquid, n.o.s. (CINNAMALDEHYDE)

Proper Shipping Name (ADN) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CINNAMALDEHYDE) Proper Shipping Name (RID) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CINNAMALDEHYDE)

Transport document description (ADR) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(CINNAMALDEHYDE), 9, III, (-)

Transport document description (IMDG) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(CINNAMALDEHYDE), 9, III, MARINE POLLUTANT

Transport document description (IATA) : UN 3082 Environmentally hazardous substance, liquid, n.o.s. (CINNAMALDEHYDE), 9, III

Transport document description (ADN) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(CINNAMALDEHYDE), 9, III

Transport document description (RID) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

9

(CINNAMALDEHYDE), 9, III

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR)

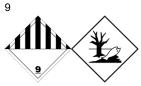
Danger labels (ADR)



IMDG

Transport hazard class(es) (IMDG) 9

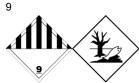
Danger labels (IMDG)



IATA

Transport hazard class(es) (IATA) : 9

Danger labels (IATA)



ADN

Transport hazard class(es) (ADN) : 9 : 9 Danger labels (ADN)

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RID

Transport hazard class(es) (RID) : 9
Danger labels (RID) : 9



14.4. Packing group

Packing group (ADR) : III
Packing group (IMDG) : III
Packing group (IATA) : III
Packing group (ADN) : III
Packing group (RID) : III

14.5. Environmental hazards

Dangerous for the environment : Yes Marine pollutant : Yes

Other information : No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR) : M6

Special provisions (ADR) : 274, 335, 375, 601

Limited quantities (ADR) : 5I Excepted quantities (ADR) : E1

Packing instructions (ADR) : P001, IBC03, LP01, R001

Special packing provisions (ADR) : PP1
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T4
Portable tank and bulk container special provisions : TP1, TP29

(ADR)

Tank code (ADR) : LGBV
Vehicle for tank carriage : AT
Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V12
Special provisions for carriage - Loading, unloading : CV13

and handling (ADR)

Hazard identification number (Kemler No.) : 90

Orange plates :

90 3082

Tunnel restriction code (ADR) : -EAC code : •3Z

Transport by sea

Transport regulations (IMDG) : Not subject Special provisions (IMDG) : 274, 335, 969

Limited quantities (IMDG) : 5 L

Excepted quantities (IMDG) : E1

Packing instructions (IMDG) : LP01, P001

Special packing provisions (IMDG) : PP1

IBC packing instructions (IMDG) : IBC03

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Tank instructions (IMDG) : T4
Tank special provisions (IMDG) : TP1, TP29
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-F
Stowage category (IMDG) : A

Air transport

Transport regulations (IATA) : Not subject PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y964
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 964
PCA max net quantity (IATA) : 450L
CAO packing instructions (IATA) : 964

Special provisions (IATA) : A97, A158, A197, A215

: 450L

ERG code (IATA) : 9L

Inland waterway transport

CAO max net quantity (IATA)

Transport regulations (ADN) : Not subject Classification code (ADN) : M6

Special provisions (ADN) : 274, 335, 375, 601

Limited quantities (ADN) : 5 L

Excepted quantities (ADN) : E1

Carriage permitted (ADN) : T

Equipment required (ADN) : PP

Number of blue cones/lights (ADN) : 0

Rail transport

Transport regulations (RID) : Not subject Classification code (RID) : M6

Special provisions (RID) : 274, 335, 375, 601

Limited quantities (RID) : 5L Excepted quantities (RID) : E1

Packing instructions (RID) : P001, IBC03, LP01, R001

Special packing provisions (RID) : PP1
Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T4
Portable tank and bulk container special provisions : TP1, TP29

(RID)

Tank codes for RID tanks (RID) : LGBV

Transport category (RID) : 3

Special provisions for carriage – Packages (RID) : W12

Special provisions for carriage - Loading, unloading : CW13, CW31

and handling (RID)

Colis express (express parcels) (RID) : CE8
Hazard identification number (RID) : 90

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

EU restriction list (REACH Annex XVII)	
Reference code	Applicable on
3(b)	CINNAMALDEHYDE

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EU restriction list (REACH Annex XVII)	
Reference code	Applicable on
3(c)	CINNAMALDEHYDE

Not listed on the REACH Candidate List

Not listed on REACH Annex XIV (Authorisation List)

Not listed on the PIC list (Regulation EU 649/2012)

Not listed on the POP list (Regulation EU 2019/1021)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

VOC content : 0 %

15.1.2. National regulations

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

Listed on the Canadian DSL (Domestic Substances List)

Germany

Water hazard class (WGK)

: WGK 1, Slightly hazardous to water (Classification according to AwSV)

Hazardous Incident Ordinance (12. BImSchV)

: Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

List of sensitizing substances (TRGS 907)

: This product is a sensitizing substance according TRGS 907

Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed SZW-lijst van mutagene stoffen : The substance is not listed SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed SZW-lijst van reprotoxische stoffen – : The substance is not listed

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen - Ontwikkeling

Denmark

Class for fire hazard : Class III-1 Store unit : 50 liter

Classification remarks : Flammable according to the Danish Ministry of Justice; Emergency management guidelines

for the storage of flammable liquids must be followed

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

: The substance is not listed

Pregnant/breastfeeding women working with the product must not be in direct contact with

the product

Switzerland

Storage class (LK) : LK 10/12 - Liquids

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration

Safety Data Sheet

according to Regulation (EU) 2015/830

Abbreviations and acronyms:		
EN	European Standard	
IARC	International Agency for Research on Cancer	
IATA	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	
PBT	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	
VOC	Volatile Organic Compounds	
CAS-No.	Chemical Abstract Service number	
N.O.S.	Not Otherwise Specified	
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disrupting properties	

Full text of H- and EUH-statements:	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1A	Skin sensitisation, category 1A

Safety Data Sheet (SDS), EU

Safety Data Sheet

according to Regulation (EU) 2015/830

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.