



SAFETY DATA SHEET ORGANIC CASSIA OIL

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

1.1. Product identifier

Product name	ORGANIC CASSIA OIL
Product number	55722
Synonyms; trade names	CASSIA OIL ORGANIC
CAS number	8007-80-5
EC number	284-635-0
FEMA	2258

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

Identified uses	Cosmetics Flavouring Aromatherapy Fragrance
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1.3. Details of the supplier of the safety data sheet

Supplier	Univar Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com
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1.4. Emergency telephone number

Emergency telephone	SGS - +32 (0)3 575 55 55 (24h)
Sds No.	55722

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Not Classified
Health hazards	Acute Tox. 3 - H311 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317
Environmental hazards	Not Classified

2.2. Label elements

EC number	284-635-0
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Hazard pictograms



Signal word	Danger
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ORGANIC CASSIA OIL

Hazard statements	H311 Toxic in contact with skin. H315 Causes skin irritation. H319 Causes serious eye irritation. H317 May cause an allergic skin reaction.
Precautionary statements	P261 Avoid breathing vapour/ spray. P280 Wear protective gloves/ protective clothing/ eye protection/ face 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. P501 Dispose of contents/ container in accordance with national regulations.
Contains	CINNAMALDEHYDE, COUMARIN, 3-(4-TERT-BUTYLPHENYL)PROPIONALDEHYDE, (4S)-1-METHYL-4-(6-METHYLHEPTA-1,5-DIEN-2-YL)CYCLOHEX-1-ENE

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.1. Substances

CINNAMALDEHYDE CAS number: 104-55-2 EC number: 203-213-9	60-100%
Classification Acute Tox. 4 - H312 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1A - H317	
COUMARIN CAS number: 91-64-5 EC number: 202-086-7 REACH registration number: 01-2119949300-45-XXXX	<1%
Classification Acute Tox. 4 - H302 Skin Sens. 1 - H317	
P-METHYLANISOLE CAS number: 104-93-8 EC number: 203-253-7	<1%
Classification Flam. Liq. 3 - H226 Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Repr. 2 - H361fd Aquatic Chronic 3 - H412	

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3-(4-TERT-BUTYLPHENYL)PROPIONALDEHYDE

<1%

CAS number: 18127-01-0

EC number: 242-016-2

REACH registration number: 01-2119983533-30-XXXX

Classification

Skin Irrit. 2 - H315

Skin Sens. 1B - H317

STOT RE 2 - H373

Aquatic Chronic 3 - H412

(4S)-1-METHYL-4-(6-METHYLHEPTA-1,5-DIEN-2-YL)CYCLOHEX-1-ENE

<1%

CAS number: 495-61-4

EC number: 610-461-5

Classification

Skin Irrit. 2 - H315

Skin Sens. 1 - H317

Asp. Tox. 1 - H304

STYRENE

<0.1%

CAS number: 100-42-5

EC number: 202-851-5

REACH registration number: 01-2119457861-32-XXXX

Classification

Flam. Liq. 3 - H226

Acute Tox. 4 - H332

Skin Irrit. 2 - H315

Eye Irrit. 2 - H319

Repr. 2 - H361d

STOT SE 3 - H335

STOT RE 1 - H372

Asp. Tox. 1 - H304

Aquatic Chronic 3 - H412

The full text for all hazard statements is displayed in Section 16.

Product name ORGANIC CASSIA OIL**CAS number** 8007-80-5**EC number** 284-635-0**Composition comments** The data shown are in accordance with the latest EC Directives.**SECTION 4: First aid measures****4.1. Description of first aid measures****Inhalation** Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if symptoms are severe or persist.**Ingestion** Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Get medical attention if symptoms are severe or persist.

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Skin contact	Take off immediately all contaminated clothing. Wash skin thoroughly with soap and water. Continue to rinse. Get medical attention immediately.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if symptoms are severe or persist.

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

Skin contact	Toxic in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Symptoms following overexposure may include the following: Irritation. Redness.
Eye contact	Causes serious eye irritation. Symptoms following overexposure may include the following: Pain or irritation. Profuse watering of the eyes. Redness.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically. Contact specialist immediately poison treatment if large quantities have been ingested or inhaled
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with the following media: Foam. Carbon dioxide or dry powder.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.
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5.3. Advice for firefighters

Protective actions during firefighting	Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation.
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6.2. Environmental precautions

Environmental precautions	Avoid the spillage or runoff entering drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.
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6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Absorb spillage with inert, damp, non-combustible material. Flush contaminated area with plenty of water. Collect and place in suitable waste disposal containers and seal securely. Provide adequate ventilation.
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6.4. Reference to other sections

Reference to other sections	Wear protective clothing as described in Section 8 of this safety data sheet. Collect and dispose of spillage as indicated in Section 13.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions	Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. In case of insufficient ventilation, wear suitable respiratory equipment. Provide adequate ventilation.
Advice on general occupational hygiene	Do not eat, drink or smoke when using this product. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions	Store in tightly-closed, original container in a dry, cool and well-ventilated place. Avoid exposure to high temperatures or direct sunlight.
Storage class	Toxic storage.

7.3. Specific end use(s)

Specific end use(s)	The identified uses for this product are detailed in Section 1.2.
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SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

STYRENE

Long-term exposure limit (8-hour TWA): WEL 100 ppm 430 mg/m³

Short-term exposure limit (15-minute): WEL 250 ppm 1080 mg/m³

WEL = Workplace Exposure Limit.

CINNAMALDEHYDE (CAS: 104-55-2)

DNEL	Workers - Inhalation; Long term systemic effects: 13.6 mg/m ³ Workers - Oral; Long term systemic effects: 3.85 mg/kg/day Consumer - Inhalation; Long term systemic effects: 2.4 mg/m ³ Consumer - Oral; Long term systemic effects: 1.37 mg/kg/day
PNEC	Fresh water; 0.021 mg/l marine water; 0.002 mg/l STP; 7.1 mg/l Sediment (Freshwater); 0.021 mg/kg Sediment (Marinewater); 0.002 mg/kg Soil; 0.004 mg/kg

BENZALDEHYDE (CAS: 100-52-7)

DNEL	Industry - Dermal; Long term systemic effects: 34.7 mg/kg/day Industry - Dermal; Long term local effects: 4.5 mg/m ³ Industry - Inhalation; Long term systemic effects: 40.4 mg/m ³ Industry - Inhalation; Long term local effects: 6.3 mg/m ³ Consumer - Oral; Long term systemic effects: 25 mg/kg/day Consumer - Inhalation; Long term systemic effects: 2.1 mg/m ³ Consumer - Dermal; Long term systemic effects: 20.8 mg/kg/day Consumer - Dermal; Long term local effects: 2.7 mg/m ³ Consumer - Inhalation; Long term local effects: 1.3 mg/m ³
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PNEC	- Soil; 0.00593 mg/kg
	- Sediment (Marinewater); 0.001044 mg/kg
	- STP; 7.59 mg/l
	- marine water; 0.000107 mg/l
	- Intermittent release; 0.0107 mg/l
	- Sediment (Freshwater); 0.01044 mg/kg
	- Fresh water; 0.00107 mg/l

SALICYLALDEHYDE (CAS: 90-02-8)

Ingredient comments	No exposure limits known for ingredient(s).
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3-(4-TERT-BUTYLPHENYL)PROPIONALDEHYDE (CAS: 18127-01-0)

DNEL	Workers - Inhalation; Long term systemic effects: 0.44 mg/m ³
	Workers - Dermal; Long term systemic effects: 1.25 mg/kg/day
	Consumer - Inhalation; Long term systemic effects: 0.11 mg/m ³
	Consumer - Dermal; Long term systemic effects: 0.625 mg/kg/day
	Consumer - Oral; Long term systemic effects: 0.625 mg/kg/day
PNEC	Fresh water; 1.05 µg/l
	marine water; 0.1 µg/l
	STP; 3.16 mg/l
	Sediment (Freshwater); 0.1 mg/kg
	Sediment (Marinewater); 10.4 µg/kg
	Soil; 20.04 µg/kg

STYRENE (CAS: 100-42-5)

DNEL	Workers - Inhalation; Short term systemic effects: 289 mg/m ³
	Workers - Inhalation; Short term local effects: 306 mg/m ³
	Workers - Inhalation; Long term systemic effects: 85 mg/m ³
	Consumer - Inhalation; Short term systemic effects: 174.25 mg/m ³
	Consumer - Inhalation; Short term local effects: 182.75 mg/m ³
	Consumer - Inhalation; Long term systemic effects: 10.2 mg/m ³
PNEC	- marine water; 0.014 mg/l
	- Intermittent release; 0.04 mg/l
	- Sediment (Freshwater); 0.614 mg/kg
	- Fresh water; 0.028 mg/l
	- Sediment (Marinewater); 0.307 mg/kg
	- Soil; 0.2 mg/kg
	- STP; 5 mg/l

3,7,11-TRIMETHYLDODECA-1,6,10-TRIEN-3-OL,MIXED ISOMERS (CAS: 7212-44-4)

DNEL	Workers - Dermal; Long term systemic effects: 2.8 mg/kg/day
	Workers - Inhalation; Long term systemic effects: 10 mg/m ³
	Consumer - Dermal; Long term systemic effects: 17 mg/kg/day
	Consumer - Oral; Long term systemic effects: 0.8 mg/kg/day
PNEC	Fresh water; 0.00051 mg/l
	marine water; 0.000051 mg/l
	Sediment (Freshwater); 0.0698 mg/kg
	Sediment (Marinewater); 0.00698 mg/kg
	STP; 10 mg/kg

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ACETOPHENONE (CAS: 98-86-2)

DNEL	Workers - Inhalation; Long term : 7 ppm Workers - Dermal; Long term : 9 mg/kg/day
PNEC	- Fresh water; 0.0864 mg/l - marine water; 0.00864 mg/l - Sediment (Freshwater); 0.82 mg/l - Sediment (Marinewater); 0.082 mg/l - STP; 10 mg/l

EUGENOL (CAS: 97-53-0)

DNEL	Workers - Inhalation; Long term systemic effects: 21.2 mg/m ³ Workers - Dermal; Long term systemic effects: 6 mg/kg/day Consumer - Inhalation; Long term systemic effects: 5.22 mg/m ³ Consumer - Dermal; Long term systemic effects: 3 mg/kg/day Consumer - Oral; Long term systemic effects: 3 mg/kg/day
PNEC	Fresh water; 1.13 µg/l marine water; 0.113 µg/l Sediment (Freshwater); 0.081 mg/kg Sediment (Marinewater); 0.008 mg/kg Soil; 0.015 mg/kg

4-ALLYLVERATROLE (CAS: 93-15-2)

Ingredient comments	No exposure limits known for ingredient(s).
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8.2. Exposure controls

Protective equipment



Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. To protect hands from chemicals, gloves should comply with European Standard EN374.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

Wash at the end of each work shift and before eating, smoking and using the toilet. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. If ventilation is inadequate, suitable respiratory protection must be worn. EN 136/140/141/145/143/149

SECTION 9: Physical and chemical properties

ORGANIC CASSIA OIL

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Yellowish. to Brownish.
Odour	Characteristic.
Odour threshold	No information available.
pH	No information available.
Melting point	-20°C
Initial boiling point and range	253°C @ 987 kPa
Flash point	122°C
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Other flammability	No information available.
Vapour pressure	7.15 Pa @ 25°C
Vapour density	No information available.
Relative density	1.045 - 1.105 @ 20°C
Bulk density	No information available.
Solubility(ies)	Soluble in water.
Partition coefficient	log Pow: 1.51 – 2.89.
Auto-ignition temperature	416°C
Decomposition Temperature	No information available.
Viscosity	No information available.
Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	No information available.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Refractive index	1.600 - 1.615
Particle size	No information available.
Molecular weight	No information available.
Volatility	No information available.
Saturation concentration	No information available.
Critical temperature	No information available.
Volatile organic compound	No information available.

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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No test data specifically related to reactivity available for this product or its ingredients.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Under normal conditions of storage and use, no hazardous reactions will occur.

10.4. Conditions to avoid

Conditions to avoid Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials to avoid No specific recommendations.

10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 332.0

Species Rat

ATE dermal (mg/kg) 332.0

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Reproductive toxicity - development No information available.

Specific target organ toxicity - single exposure

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STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Inhalation Gas or vapour in high concentrations may irritate the respiratory system.

Ingestion The product irritates mucous membranes and may cause abdominal discomfort if swallowed.

Skin contact Toxic in contact with skin. Causes skin irritation. May cause an allergic skin reaction.
Symptoms following overexposure may include the following: Irritation. Redness.

Eye contact Causes serious eye irritation. Symptoms following overexposure may include the following:
Pain or irritation. Profuse watering of the eyes. Redness.

Toxicological information on ingredients.

CINNAMALDEHYDE

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ 2200 mg/kg, Oral, Rat

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 1,100.0

Species Rabbit

Notes (dermal LD₅₀) Harmful in contact with skin.
LD₅₀ 1100 mg/kg, Dermal, Rabbit

ATE dermal (mg/kg) 1,100.0

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.
Irritating to eyes. Rabbit

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity

Genotoxicity - in vitro Bacterial reverse mutation test: Negative.

2 METHOXYCINNAMALDEHYDE

General information This product has low toxicity. Only large quantities are likely to have adverse effects on human health.

COUMARIN

Acute toxicity - oral

ORGANIC CASSIA OIL

Acute toxicity oral (LD ₅₀ mg/kg)	500.0
Species	Rat
Notes (oral LD ₅₀)	LD ₅₀ 500 mg/kg, Oral, Rat
ATE oral (mg/kg)	500.0

BENZALDEHYDE

Acute toxicity - oral

Acute toxicity oral (LD ₅₀ mg/kg)	1,430.0
Species	Rat
Notes (oral LD ₅₀)	LD ₅₀ 1430 mg/kg, Oral, Rat
ATE oral (mg/kg)	1,430.0

Acute toxicity - dermal

Notes (dermal LD ₅₀)	LD ₅₀ >2000 mg/kg, Dermal, Rabbit
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Acute toxicity - inhalation

Notes (inhalation LC ₅₀)	OECD 436
ATE inhalation (vapours mg/l)	11.0

Skin corrosion/irritation

Skin corrosion/irritation	No information available.
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Serious eye damage/irritation

Serious eye damage/irritation	Causes serious eye irritation.
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Respiratory sensitisation

Respiratory sensitisation	No information available.
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Skin sensitisation

Skin sensitisation	No information available.
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Germ cell mutagenicity

Genotoxicity - in vitro	No information available.
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Carcinogenicity

Carcinogenicity	No information available.
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Reproductive toxicity

Reproductive toxicity - fertility	No information available.
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Specific target organ toxicity - single exposure

STOT - single exposure	May cause respiratory irritation.
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Specific target organ toxicity - repeated exposure

STOT - repeated exposure	No information available.
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ORGANIC CASSIA OIL

Aspiration hazard

Aspiration hazard	No information available.
Inhalation	Harmful by inhalation. Irritating to respiratory system.
Ingestion	Harmful if swallowed.
Skin contact	Prolonged skin contact may cause temporary irritation.
Eye contact	Causes serious eye irritation.

PHENETHYL ACETATE

Acute toxicity - oral

Acute toxicity oral (LD ₅₀ mg/kg)	3,670.0
Species	Rat
Notes (oral LD ₅₀)	LD ₅₀ 3670 mg/kg, Oral, Rat
ATE oral (mg/kg)	3,670.0

Acute toxicity - dermal

Acute toxicity dermal (LD ₅₀ mg/kg)	6,210.0
Species	Rabbit
Notes (dermal LD ₅₀)	LD ₅₀ 6210 mg/kg, Dermal, Rabbit
ATE dermal (mg/kg)	6,210.0

PHENYL ETHYL ALCOHOL

Acute toxicity - oral

Acute toxicity oral (LD ₅₀ mg/kg)	1,610.0
Species	Rat
Notes (oral LD ₅₀)	LD ₅₀ 1610 mg/kg, Oral, Rat
ATE oral (mg/kg)	1,610.0

Acute toxicity - dermal

Acute toxicity dermal (LD ₅₀ mg/kg)	2,500.0
Species	Rabbit
Notes (dermal LD ₅₀)	LD ₅₀ 2500 mg/kg, Dermal, Rabbit
ATE dermal (mg/kg)	2,500.0

Inhalation	Vapours irritate the respiratory system. May cause coughing and difficulties in breathing.
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Ingestion	Harmful if swallowed.
Skin contact	Harmful in contact with skin.
Eye contact	Irritating to eyes.

P-METHYLANISOLE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,920.0

Species Rat

ATE oral (mg/kg) 1,920.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 5,001.0

Species Rabbit

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation No information available.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation No information available.

Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility Suspected of damaging the unborn child.

Reproductive toxicity - development No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

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Inhalation	Gas or vapour in high concentrations may irritate the respiratory system.
Ingestion	Harmful if swallowed.
Skin contact	Causes skin irritation. Symptoms following overexposure may include the following: Irritation. Redness.
Eye contact	May cause temporary eye irritation.

SALICYLALDEHYDE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 520.0

Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 3,000.0

Species Rabbit

ATE dermal (mg/kg) 3,000.0

Skin corrosion/irritation

Animal data Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation Data lacking.

Skin sensitisation

Skin sensitisation Data lacking.

Germ cell mutagenicity

Genotoxicity - in vitro Data lacking.

Carcinogenicity

Carcinogenicity Data lacking.

Reproductive toxicity

Reproductive toxicity - fertility Data lacking.

Specific target organ toxicity - single exposure

STOT - single exposure Data lacking.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Data lacking.

Aspiration hazard

Aspiration hazard Data lacking.

ORGANIC CASSIA OIL

Inhalation	Gas or vapour in high concentrations may irritate the respiratory system.
Ingestion	Harmful if swallowed.
Skin contact	Prolonged skin contact may cause temporary irritation.
Eye contact	May cause temporary eye irritation.

3-(4-TERT-BUTYLPHENYL)PROPIONALDEHYDE

Acute toxicity - oral

Acute toxicity oral (LD ₅₀ mg/kg)	2,660.0
Species	Rat
Notes (oral LD ₅₀)	LD ₅₀ 2660 mg/kg, Oral, Rat
ATE oral (mg/kg)	2,660.0

Acute toxicity - dermal

Acute toxicity dermal (LD ₅₀ mg/kg)	5,001.0
Species	Rabbit
Notes (dermal LD ₅₀)	LD ₅₀ > 5000 mg/kg, Dermal, Rabbit
ATE dermal (mg/kg)	5,001.0

Skin corrosion/irritation

Skin corrosion/irritation	Irritating to skin. Rabbit
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Skin sensitisation

Skin sensitisation	Guinea pig maximization test (GPMT) - Guinea pig: Sensitising.
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Germ cell mutagenicity

Genotoxicity - in vitro	Bacterial reverse mutation test: Negative.
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CARYOPHYLLENE

Skin sensitisation

Skin sensitisation	May cause an allergic skin reaction.
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Germ cell mutagenicity

Genotoxicity - in vitro	Bacterial reverse mutation test: Negative.
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Aspiration hazard

Aspiration hazard	May be fatal if swallowed and enters airways.
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STYRENE

Acute toxicity - oral

Acute toxicity oral (LD ₅₀ mg/kg)	5,000.0
Species	Rat
ATE oral (mg/kg)	5,000.0

ORGANIC CASSIA OIL

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 24.0

Species Rat

ATE inhalation (vapours mg/l) 11.0

Carcinogenicity

IARC carcinogenicity IARC Group 2B Possibly carcinogenic to humans.

2-PINENE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 500.0

Species Rat

Notes (oral LD₅₀) LD₅₀ 3700 mg/kg, Oral, Rat

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 5,000.0

Species Rat

Notes (dermal LD₅₀) LD₅₀ 5000 mg/kg, Dermal, Rat

ATE dermal (mg/kg) 5,000.0

Inhalation May cause respiratory system irritation.

Ingestion Harmful: may cause lung damage if swallowed.

Skin contact May cause sensitisation by skin contact.

Eye contact Irritating to eyes.

3,7,11-TRIMETHYLDODECA-1,6,10-TRIEN-3-OL,MIXED ISOMERS

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ > 2610 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ >5000 mg/kg, Dermal, Rabbit

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

Skin sensitisation

Skin sensitisation Not sensitising.

Germ cell mutagenicity

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Genotoxicity - in vitro Bacterial reverse mutation test: Negative.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL 100 mg/kg, Oral, Rat

ACETOPHENONE

Toxicological effects No information available.

Acute toxicity - oral

Notes (oral LD₅₀) Harmful if swallowed.

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 3,300.0

Species Rat

Notes (dermal LD₅₀) LD₅₀ 3300 mg/kg, Dermal, Rabbit

ATE dermal (mg/kg) 3,300.0

Skin corrosion/irritation

Animal data Not irritating. Rabbit

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

Respiratory sensitisation

Respiratory sensitisation Not sensitising.

Skin sensitisation

Skin sensitisation Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met. OECD 422

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

ORGANIC CASSIA OIL

Inhalation	Gas or vapour may irritate the respiratory system.
Ingestion	Harmful if swallowed.
Skin contact	Prolonged skin contact may cause temporary irritation.
Eye contact	Causes serious eye irritation.

EUGENOL

Acute toxicity - oral

Acute toxicity oral (LD ₅₀ mg/kg)	2,300.0
Species	Rat
Notes (oral LD ₅₀)	LD ₅₀ 2300 mg/kg, Oral, Rat
ATE oral (mg/kg)	2,300.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC ₅₀ dust/mist mg/l)	2,580.0
Species	Rat
Notes (inhalation LC ₅₀)	LC ₅₀ 2580 mg/l, Dust/Mist, Inhalation, Rat
ATE inhalation (dusts/mists mg/l)	2,580.0

Serious eye damage/irritation

Serious eye damage/irritation	Causes serious eye irritation.
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Skin sensitisation

Skin sensitisation	May cause an allergic skin reaction. Guinea pig maximization test (GPMT) - Guinea pig: Sensitising.
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4-ALLYLVERATROLE

Acute toxicity - oral

ATE oral (mg/kg)	500.0
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Inhalation	Gas or vapour in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Coughing.
Ingestion	May cause discomfort if swallowed.
Skin contact	Liquid may irritate skin.
Eye contact	May cause temporary eye irritation.

5 ALLYL 1 3 BENZODIOXOLE

Acute toxicity - oral

ATE oral (mg/kg)	500.0
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ORGANIC CASSIA OIL

Ecotoxicity

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Ecological information on ingredients.

BENZALDEHYDE

Ecotoxicity

The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

PHENYL ETHYL ALCOHOL

Ecotoxicity

The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

P-METHYLANISOLE

Ecotoxicity

Harmful to aquatic life with long lasting effects.

SALICYLALDEHYDE

Ecotoxicity

Toxic to aquatic life with long lasting effects.

CARYOPHYLLENE

Ecotoxicity

May cause long lasting harmful effects to aquatic life.

2-PINENE

Ecotoxicity

The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

ACETOPHENONE

Ecotoxicity

The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

4-ALLYLVERATROLE

Ecotoxicity

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.1. Toxicity

Toxicity

Not considered toxic to fish.

Ecological information on ingredients.

CINNAMALDEHYDE

Acute aquatic toxicity

Acute toxicity - fish

LC₅₀, 96 hour: 4.5 mg/l, Fish

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hour: 3.21 mg/l, Daphnia magna

ORGANIC CASSIA OIL

Acute toxicity - aquatic plants

IC₅₀, 72 hour: 16.09 mg/l, Algae

COUMARIN

Acute aquatic toxicity

Acute toxicity - fish

LC₅₀, 96 hour: 56 mg/l, Fish

BENZALDEHYDE

Toxicity

No information available.

Acute aquatic toxicity

Acute toxicity - fish

LC₅₀, 96 hours: 1.07 mg/l, Fish

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hours: 23.7 mg/l, Daphnia magna

Acute toxicity - aquatic plants

EC₅₀, 96 hours: 31.3 mg/l, Algae

PHENETHYL ACETATE

Acute aquatic toxicity

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hours: 36.6 mg/l, Daphnia magna

PHENYL ETHYL ALCOHOL

Acute aquatic toxicity

Acute toxicity - fish

LC₅₀, 96 hours: 230 mg/l,

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hours: 287 mg/l, Daphnia magna

P-METHYLANISOLE

Toxicity

Harmful to aquatic life.

Acute aquatic toxicity

Acute toxicity - fish

LC₅₀, 96 hour: 46 - 100 mg/l, Fish

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hour: 44.2 mg/l, Daphnia magna

Acute toxicity - aquatic plants

IC₅₀, 72 hour: 320 mg/l, Algae

SALICYLALDEHYDE

Acute aquatic toxicity

Acute toxicity - fish

LC₅₀, 96 hours: 2.3 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hours: 4.1 mg/l, Daphnia magna

3-(4-TERT-BUTYLPHENYL)PROPIONALDEHYDE

ORGANIC CASSIA OIL

Acute aquatic toxicity

Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hour: 1.8 mg/l, Daphnia magna OECD 202
Acute toxicity - aquatic plants	IC ₅₀ , 72 hour: 4.3 mg/l, Algae OECD 201 NOEC, 72 hour: 0.72 mg/l, Algae

CARYOPHYLLENE

Toxicity	May cause long lasting harmful effects to aquatic life.
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STYRENE

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: >1 - <=10 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: >1 - <=10 mg/l,
Acute toxicity - aquatic plants	EC ₅₀ , : >1 - <=10 mg/l,

2-PINENE

Acute aquatic toxicity

LE(C) ₅₀	0.1 < L(E)C ₅₀ ≤ 1
M factor (Acute)	1
Acute toxicity - aquatic invertebrates	LC ₅₀ , 48 hour: 6.74 mg/l, Daphnia magna

Chronic aquatic toxicity

NOEC	0.01 < NOEC ≤ 0.1
Degradability	Non-rapidly degradable
M factor (Chronic)	1

3,7,11-TRIMETHYLDODECA-1,6,10-TRIEN-3-OL,MIXED ISOMERS

Toxicity	Very toxic to aquatic life with long lasting effects.
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Acute aquatic toxicity

LE(C) ₅₀	0.1 < L(E)C ₅₀ ≤ 1
M factor (Acute)	1
Acute toxicity - fish	LC ₅₀ , 96 hour: 1.43 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hour: 0.51 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC ₅₀ , 72 hour: 2 mg/l, Algae OECD 201

Chronic aquatic toxicity

M factor (Chronic)	1
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ORGANIC CASSIA OIL

ACETOPHENONE

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 162 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 528 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 86.4 mg/l, Pseudokirchneriella subcapitata NOEC, 72 hours: 24.8 mg/l, Pseudokirchneriella subcapitata
Acute toxicity - microorganisms	EC ₅₀ , 3 hours: >1000 mg/l, Activated sludge

EUGENOL

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hour: 13 mg/l, Fish OECD 203
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hour: 1.3 mg/l, Daphnia magna OECD 202
Acute toxicity - aquatic plants	IC ₅₀ , 72 hours: 24 mg/l, Algae NOEC, 72 hours: 23 mg/l, Algae

4-ALLYLVERATROLE

Toxicity	Not considered toxic to fish.
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12.2. Persistence and degradability

Persistence and degradability The product is readily biodegradable.

Ecological information on ingredients.

CINNAMALDEHYDE

Persistence and degradability	The product is readily biodegradable.
Biodegradation	- Degradation 88%: 28 day

COUMARIN

Persistence and degradability	The product is readily biodegradable.
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BENZALDEHYDE

Persistence and degradability	The product is readily biodegradable.
Biodegradation	OECD 301B

PHENETHYL ACETATE

Persistence and degradability	The substance is readily biodegradable.
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ORGANIC CASSIA OIL

PHENYL ETHYL ALCOHOL

Persistence and degradability

The substance is readily biodegradable.

P-METHYLANISOLE

Persistence and degradability

The product is not readily biodegradable.

SALICYLALDEHYDE

Persistence and degradability

There are no data on the degradability of this product.

3-(4-TERT-BUTYLPHENYL)PROPIONALDEHYDE

Persistence and degradability

The product is readily biodegradable.

Biodegradation

- Degradation 77%: 28 days
OECD 302
- Degradation 65%: 28 days
OECD 301F

2-PINENE

Persistence and degradability

The product is readily biodegradable.

3,7,11-TRIMETHYLDODECA-1,6,10-TRIEN-3-OL,MIXED ISOMERS

Persistence and degradability

The product is readily biodegradable.

Biodegradation

- 70-80%: 28 days

ACETOPHENONE

Persistence and degradability

The product is readily biodegradable.

Biodegradation

- 64.7%:
OECD 301C

EUGENOL

Persistence and degradability

The product is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

Partition coefficient

log Pow: 1.51 – 2.89.

Ecological information on ingredients.

CINNAMALDEHYDE

ORGANIC CASSIA OIL

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient log Pow: 2.1

BENZALDEHYDE

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient log Pow: 1.48

P-METHYLANISOLE

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient log Pow: 2.659

SALICYLALDEHYDE

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient log Pow: 1.81

3-(4-TERT-BUTYLPHENYL)PROPIONALDEHYDE

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient log Pow: 3.2

CARYOPHYLLENE

Bioaccumulative potential Potentially bioaccumulating.

Partition coefficient log Pow: 6.23

3,7,11-TRIMETHYLDODECA-1,6,10-TRIEN-3-OL,MIXED ISOMERS

Partition coefficient log Pow: 4.5

ACETOPHENONE

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.
BCF: 0.47,

Partition coefficient log Pow: 1.65

12.4. Mobility in soil

Mobility Soluble in water.

Ecological information on ingredients.

2 METHOXYCINNAMALDEHYDE

Mobility The product is insoluble in water.

BENZALDEHYDE

Mobility The product is soluble in water.

Surface tension 70.5 mN/m @ @ 20°C OECD 115

ORGANIC CASSIA OIL

P-METHYLANISOLE

Mobility No information available.

SALICYLALDEHYDE

Mobility No information available.

2-PINENE

Mobility The product is insoluble in water.

ACETOPHENONE

Mobility No information available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

BENZALDEHYDE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

P-METHYLANISOLE

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

SALICYLALDEHYDE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

ACETOPHENONE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects None known.

Ecological information on ingredients.

BENZALDEHYDE

Other adverse effects Not determined.

P-METHYLANISOLE

Other adverse effects None known.

SALICYLALDEHYDE

ORGANIC CASSIA OIL

Other adverse effects No information available.

ACETOPHENONE

Other adverse effects Not determined.

4-ALLYLVERATROLE

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Do not puncture or incinerate, even when empty. Waste is classified as hazardous waste.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General Wear protective clothing as described in Section 8 of this safety data sheet.

14.1. UN number

UN No. (ADR/RID)	2810
UN No. (IMDG)	2810
UN No. (ICAO)	2810
UN No. (ADN)	2810

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	TOXIC LIQUID, ORGANIC, N.O.S. (CINNAMOMUM CASSIA, EXT)
Proper shipping name (IMDG)	TOXIC LIQUID, ORGANIC, N.O.S. (CINNAMOMUM CASSIA, EXT)
Proper shipping name (ICAO)	TOXIC LIQUID, ORGANIC, N.O.S. (CINNAMOMUM CASSIA, EXT)
Proper shipping name (ADN)	TOXIC LIQUID, ORGANIC, N.O.S. (CINNAMOMUM CASSIA, EXT)

14.3. Transport hazard class(es)

ADR/RID class	6.1
ADR/RID classification code	T1
ADR/RID label	6.1
IMDG class	6.1
ICAO class/division	6.1
ADN class	6.1

Transport labels



14.4. Packing group

ADR/RID packing group III

ORGANIC CASSIA OIL

IMDG packing group III

ICAO packing group III

ADN packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

EmS F-A, S-A

ADR transport category 2

Emergency Action Code 2X

Hazard Identification Number 60
(ADR/RID)

Tunnel restriction code (E)

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

Transport in bulk according to Annex II of MARPOL 73/78
and the IBC Code No information required.

SECTION 15: Regulatory information

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

EU legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
Commission Regulation (EU) No 2015/830 of 28 May 2015.

Restrictions (Annex XVII Regulation 1907/2006) This product is/contains a substance that is included in REGULATION (EC) No 1907/2006 (REACH) ANNEX XVII - RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES. Entry number: 3

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

ORGANIC CASSIA OIL

Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
 CAS: Chemical Abstracts Service.
 DNEL: Derived No Effect Level.
 IATA: International Air Transport Association.
 IMDG: International Maritime Dangerous Goods.
 Kow: Octanol-water partition coefficient.
 LC₅₀: Lethal Concentration to 50 % of a test population.
 LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
 PBT: Persistent, Bioaccumulative and Toxic substance.
 PNEC: Predicted No Effect Concentration.
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
 RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
 vPvB: Very Persistent and Very Bioaccumulative.
 IARC: International Agency for Research on Cancer.
 MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
 cATpE: Converted Acute Toxicity Point Estimate.
 BCF: Bioconcentration Factor.
 BOD: Biochemical Oxygen Demand.
 EC₅₀: 50% of maximal Effective Concentration.
 LOAEC: Lowest Observed Adverse Effect Concentration.
 LOAEL: Lowest Observed Adverse Effect Level.
 NOAEC: No Observed Adverse Effect Concentration.
 NOAEL: No Observed Adverse Effect Level.
 NOEC: No Observed Effect Concentration.
 LOEC: Lowest Observed Effect Concentration.
 DMEL: Derived Minimal Effect Level.
 EL50: Exposure Limit 50
 hPa: Hectopascal
 LL50: Lethal Loading fifty
 OECD: Organisation for Economic Co-operation and Development
 POW: Octanol-water partition coefficient
 SCBA: self-contained breathing apparatus
 STP: Sewage Treatment Plant
 VOC: Volatile Organic Compounds

Classification abbreviations and acronyms

Acute Tox. = Acute toxicity
 Aquatic Acute = Hazardous to the aquatic environment (acute)
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Key literature references and sources for data

Supplier's information.

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date

14/07/2021

Version number

2.000

Supersedes date

22/08/2018

SDS number

55722

ORGANIC CASSIA OIL

SDS status	Approved.
Hazard statements in full	H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H311 Toxic in contact with skin. H312 Harmful in contact with skin. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H332 Harmful if inhaled. H335 May cause respiratory irritation. H361d Suspected of damaging the unborn child. H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. H372 Causes damage to organs (hearing organs) through prolonged or repeated exposure. H373 May cause damage to organs (Liver) through prolonged or repeated exposure if swallowed. H412 Harmful to aquatic life with long lasting effects.
Signature	Jitendra Panchal

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