

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 6/26/2019 Revision date: 2/1/2023 Supersedes version of: 6/5/2020 Version: 3.0

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

1.1. Product identifier

Product form : Substance

Substance name : Patchouli Organic Essential Oil, All Origins

Chemical name : Oils, patchouli; Patchouly oil -

 EC-No.
 : 282-493-4

 CAS-No.
 : 84238-39-1

 Product code
 : 10349TOC

 Type of product
 : Essential oil

 Product group
 : Raw material

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

1.2.1. Relevant identified uses

Main use category : Industrial use

1.2.2. Uses advised againstNo additional information available

1.3. Details of the supplier of the safety data sheet

SIRIUS SAS

57 Chemin de la Métairie Haute 81580 CAMBOUNET SUR LE SOR

France

T + 33 (0)5-32-09-11-72 contact@sirius-bio.com

1.4. Emergency telephone number

No additional information available

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin corrosion/irritation, Category 2 H315
Serious eye damage/eye irritation, Category 2 H319
Skin sensitisation, Category 1 H317
Hazardous to the aquatic environment – Chronic Hazard, Category 2 H411

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

Adverse physicochemical, human health and environmental effects

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms (CLP)





GHS07

GHS09

Signal word (CLP) : Warning

Hazard statements (CLP) : H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation.

H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P261 - Avoid breathing spray, mist.

P264 - Wash hands thoroughly after handling.

P280 - Wear protective gloves, protective clothing, eye protection.

P321 - Specific treatment (see supplemental first aid instruction on this label). P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P391 - Collect spillage.

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 3: Composition/information on ingredients

3.1. Substances

Name : Patchouli Organic Essential Oil, All Origins

CAS-No. : 84238-39-1 EC-No. : 282-493-4

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
Patchoulol	CAS-No.: 5986-55-0 EC-No.: 227-807-2	25 – 50	Aquatic Chronic 2, H411	
Bulnesene	-	10 – 25	Not classified	
Alpha Guaiene	CAS-No.: 3691-12-1		Eye Irrit. 2, H319	
Alpha Patchoulene	-	1 – 20	Not classified	
Seychellene	CAS-No.: 20085-93-2	1 – 20	Not classified	
(E) Beta Caryophyllene	CAS-No.: 87-44-5 EC-No.: 201-746-1	1 – 10	Skin Sens. 1B, H317 Asp. Tox. 1, H304	
Aciphyllene	-	1 – 5	Not classified	
Beta Patchoulene	CAS-No.: 514-51-2 EC-No.: 208-182-5	1 – 5	Not classified	
Pogostol	CAS-No.: 21698-41-9	1 – 5	Not classified	
Allo-aromadendrene	CAS-No.: 25246-27-9	< 5	Not classified	
Gamma patchoulene	CAS-No.: 508-55-4	< 5	Not classified	
Alpha Humulene	CAS-No.: 6753-98-6 EC-No.: 229-816-7	0.1 – 5	Not classified	
Beta Elemen	CAS-No.: 33880-83-0 EC-No.: 251-713-0	< 5	Not classified	
Caryophyllene oxide	CAS-No.: 1139-30-6 EC-No.: 214-519-7	0.1 – 5	Aquatic Chronic 2, H411	
Copaene	CAS-No.: 3856-25-5 EC-No.: 223-364-4	< 5	Not classified	
Cycloseychellene	CAS-No.: 52617-34-2	< 5	Not classified	
Iso caryophyllene	CAS-No.: 118-65-0 EC-No.: 204-267-6	< 5	Not classified	
Norpatchoulenol	CAS-No.: 41429-52-1	0.1 – 5	Not classified	
Beta Farnesene	CAS-No.: 18794-84-8 EC-No.: 242-582-0	< 1	Asp. Tox. 1, H304	
Beta Selinene	CAS-No.: 17066-67-0	< 1	Not classified	
Bulnesol	CAS-No.: 22451-73-6	< 1	Not classified	
Gamma selinene	CAS-No.: 515-17-3	< 1	Not classified	
7-Epi-Alpha selinene	CAS-No.: 123123-37-5	< 1	Not classified	
Alpha panasinsen	CAS-No.: 56633-28-4	0.1 – 1	Not classified	
Delta Elemene	CAS-No.: 11029-06-4	< 1	Not classified	
Beta Pinene	CAS-No.: 127-91-3 EC-No.: 204-872-5	<1	Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317	
Calarene	CAS-No.: 17334-55-3 EC-No.: 241-359-5	< 1	Not classified	

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Eudesma 7 en 4 OL	-	< 1	Not classified
Cadinene Delta	CAS-No.: 483-76-1	< 1	Not classified
Farnesene	CAS-No.: n.a.	< 1	Asp. Tox. 1, H304
Alpha pinene	CAS-No.: 80-56-8 EC-No.: 201-291-9 REACH-no: 01-2119519223- 49	<1	Asp. Tox. 1, H304 Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317
Alpha Gurjunene	CAS-No.: 489-40-7 EC-No.: 207-695-1	< 1	Not classified
Limonene	CAS-No.: 138-86-3 EC-No.: 227-813-5 EC Index-No.: 601-096-00-2 REACH-no: 01-2119529223-47	<1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 3, H412
Eugenol	CAS-No.: 97-53-0 EC-No.: 202-589-1	< 0.1	Eye Irrit. 2, H319 Skin Sens. 1B, H317
Linalool *	CAS-No.: 78-70-6 EC-No.: 201-134-4 EC Index-No.: 603-235-00-2 REACH-no: 01-2119474016-	< 0.1	Skin Sens. 1B, H317

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

3.2. Mixtures

Not established.

SECTION 4: First aid measures

4.1. Description of first aid measures

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 skin contact : Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Eye irritation.

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.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

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

dust/fume/gas/mist/vapours/spray.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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 : Collect spillage.

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. Avoid contact with skin and eyes. 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.

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

No additional information available

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:

Wear suitable protective clothing

Hand protection:

Protective gloves

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid Colour : Not available Odour : Not available : Not available Odour threshold Melting point : Not applicable Freezing point : Not available Boiling point : Not available : Non flammable. Flammability **Explosive limits** : Not available Lower explosion limit : Not available Upper explosion limit : Not available : 114.5 °C Flash point Auto-ignition temperature : Not available Decomposition temperature : Not available рΗ : Not available : Not available Viscosity, kinematic Solubility : Not available Partition coefficient n-octanol/water (Log Kow) : Not available · Not available Vapour pressure Vapour pressure at 50°C : Not available Density : Not available : Not available Relative density Relative vapour density at 20°C : Not available Particle characteristics : Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

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

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

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

2/1/2023 (Revision date) EN (English) 5/11

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 11: Toxicological information	
11.1. Information on hazard classes as define	d in Regulation (EC) No 1272/2008
	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Alpha pinene (80-56-8)	
LD50 oral	3700 mg/kg bodyweight
LD50 dermal	> 5000 mg/kg bodyweight
Beta Pinene (127-91-3)	
LD50 oral rat	300 – 2000 mg/kg OCDE 423
LD50 dermal rat	> 2000 mg/kg
Eugenol (97-53-0)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)
LD50 oral	1500 – 1500 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)
Limonene (138-86-3)	
LD50 oral	4400 mg/kg bodyweight
LD50 dermal rabbit	5000 mg/kg Source: National Library of Medicine/Hazardous Substances Data Bank
LD50 dermal	> 2000 mg/kg bodyweight
Linalool * (78-70-6)	
LD50 oral rat	2790 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 2440 - 3180
LD50 oral	2790 mg/kg bodyweight
LD50 dermal rabbit	5610 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), 95% CL: 3578 - 8374
LD50 dermal	5610 mg/kg bodyweight
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
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
Eugenol (97-53-0)	
NOAEL (subchronic, oral, animal/male, 90 days)	≥ 900 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: other:OECD Guideline 451 (Carcinogenicity Studies)
NOAEL (subchronic, oral, animal/female, 90 days)	450 mg/kg bodyweight Animal: mouse, Animal sex: female, Guideline: other:OECD Guideline 451 (Carcinogenicity Studies)
Linalool * (78-70-6)	
LOAEL (dermal, rat/rabbit, 90 days)	Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)
Aspiration hazard	: Not classified
Linalool * (78-70-6)	
Viscosity, kinematic	5.192 mm²/s
11.2. Information on other hazards	

No additional information available

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term

(acute

: Not classified

Hazardous to the aquatic environment, long-term

(chronic)

: Toxic to aquatic life with long lasting effects.

Not rapidly degradable

Patchouli Organic Essential Oil, All Origins (84238-39-1)		
EC50 96h - Algae [1]	2.616 mg/l Source: ECOSAR	
Alpha pinene (80-56-8)		
LC50 - Fish [1]	0.28 mg/l	
EC50 - Other aquatic organisms [1]	1.44 mg/l waterflea	
Eugenol (97-53-0)		
LC50 - Fish [1]	13 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)	
EC50 - Crustacea [1]	1.05 mg/l Test organisms (species): Daphnia magna	
Limonene (138-86-3)		
LC50 - Fish [1]	0.72 mg/l	
EC50 - Crustacea [1]	17 mg/l Source: The ECOTOXicology database	
EC50 - Other aquatic organisms [1]	0.36 mg/l waterflea	
EC50 96h - Algae [1]	0.212 mg/l Source: Ecological Structure Activity Relationships	
Linalool * (78-70-6)		
LC50 - Fish [1]	27.8 mg/l	
EC50 - Crustacea [1]	59 mg/l Test organisms (species): Daphnia magna	
EC50 - Other aquatic organisms [1]	20 mg/l waterflea	
EC50 - Other aquatic organisms [2]	88.3 mg/l	
EC50 96h - Algae [1]	88.3 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)	
EC50 96h - Algae [2]	156.7 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)	

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative	potential
-----------------------	-----------

Alpha pinene (80-56-8)		
Partition coefficient n-octanol/water (Log Pow)	4.32	
Limonene (138-86-3)		
Partition coefficient n-octanol/water (Log Pow) 4.38		
Linalool * (78-70-6)		
Partition coefficient n-octanol/water (Log Pow) 2.84		
12.4. Mobility in soil		

Patchouli Organic Essential Oil, All Origins (84238-39-1)

۱.,	 		_	
			_	

Mobility in soil 518.9 Source: EPISUITE

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

2/1/2023 (Revision date) EN (English) 7/11

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

SECTION 14: Transport information

In accordance with ADR / IMD	OG / IATA / ADN / RID				
ADR	IMDG	IATA	ADN	RID	
14.1. UN number or ID n	umber				
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082	
14.2. UN proper shippin	g name				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Beta Pinene; Limonene; Patchoulol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Beta Pinene; Limonene; Patchoulol)	Environmentally hazardous substance, liquid, n.o.s. (Beta Pinene ; Limonene ; Patchoulol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Beta Pinene; Limonene; Patchoulol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Beta Pinene; Limonene; Patchoulol)	
Transport document descr	iption				
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Beta Pinene; Limonene; Patchoulol), 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Beta Pinene; Limonene; Patchoulol), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Beta Pinene; Limonene; Patchoulol), 9,	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Beta Pinene; Limonene; Patchoulol), 9,	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Beta Pinene; Limonene; Patchoulol), 9,	
14.3. Transport hazard	class(es)				
9	9	9	9	9	
		₩ <u>*</u>			
14.4. Packing group					
III	III	III	III	III	
14.5. Environmental haz	14.5. Environmental hazards				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	

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) : 51 Excepted quantities (ADR) : E1

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

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

Portable tank and bulk container special provisions

(ADR)

: TP1, TP29

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

unloading and handling (ADR)

Hazard identification number (Kemler No.) : 90

2/1/2023 (Revision date) EN (English) 8/11

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Orange plates : 90

Tunnel restriction code (ADR)

Transport by sea

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
Tank instructions (IMDG) : T4
Tank special provisions (IMDG) : TP1, TP29

EmS-No. (Fire): F-AEmS-No. (Spillage): S-FStowage category (IMDG): A

Air transport

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
CAO max net quantity (IATA) : 450L

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

ERG code (IATA) : 9L

Inland waterway transport

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

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 and handling (RID)

: CW13, CW31

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

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

14.7. Maritime transport in bulk according to IMO instruments

Not established.

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Not listed on REACH Annex XVII

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

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

POP Regulation (Persistent Organic Pollutants)

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

Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

Explosives Precursors Regulation (2019/1148)

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

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

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	
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	

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms:		
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 (Oral)	Acute toxicity (oral), Category 4	
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1	
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2	
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3	
Asp. Tox. 1	Aspiration hazard, Category 1	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Flam. Liq. 3	Flammable liquids, Category 3	
H226	Flammable liquid and vapour.	
H302	Harmful if swallowed.	
H304	May be fatal if swallowed and enters airways.	
H315	Causes skin irritation.	
H317	May cause an allergic skin reaction.	
H319	Causes serious eye irritation.	
H400	Very toxic to aquatic life.	
H410	Very toxic to aquatic life with long lasting effects.	
H411	Toxic to aquatic life with long lasting effects.	
H412	Harmful to aquatic life with long lasting effects.	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
Skin Sens. 1	Skin sensitisation, Category 1	
Skin Sens. 1B	Skin sensitisation, category 1B	

Safety Data Sheet (SDS), EU

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.