

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Issue date: 4/30/2014 Revision date: 6/18/2021 Supersedes version of: 3/4/2021 Version: 1.9

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

Product form	: Substance
Substance name	: WHITE GRAPEFRUIT ORGANIC OIL
EC-No.	: 289-904-6
CAS-No.	: 8016-20-4
REACH registration No	: 01-2120119763-56
Product code	: BPAMHE01
Synonyms	: Autres No d'enregistrement : CAS 90045-43-5 / CITRUS PARADISI M. PEEL OIL EXPRESSED (**) Not officially an INCI Name but Perfuming Name
Product group	: Organic essential oil

### 1.2.1. Relevant identified uses

Main use category	:	Industrial use
Industrial/Professional use spec	:	Industrial
		For professional use only

### 1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet
EXAFLOR
5 rue des Pyrénées
P.O. Box CP 30561
94653 Rungis Cedex - France
T +33 (0)1 41 73 23 10
exaflor@orange.fr - www.exaflor.co
1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
	ORFILA (FRANCE)		+33 1 45 42 59 59	

SECTION 2: Hazards identification	
2.1. Classification of the substance or mixture	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	
Flammable liquids, Category 3	H226
Skin corrosion/irritation, Category 2	H315
Skin sensitisation, Category 1	H317
Aspiration hazard, Category 1	H304
Hazardous to the aquatic environment — Acute Hazard, Category 1	H400
Hazardous to the aquatic environment — Chronic Hazard, Category 1	H410
Full text of H-statements: see section 16	
Adverse physicochemical, human health and environmental effects	

Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. May be fatal if swallowed and enters airways. Very toxic to aquatic life with long lasting effects.

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

### 2.2. Label elements Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms (CLP) GHS02 GHS07 GHS08 GHS09 Signal word (CLP) : Danger : H226 - Flammable liquid and vapour. Hazard statements (CLP) H304 - May be fatal if swallowed and enters airways. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H410 - Very toxic to aquatic life with long lasting effects. Precautionary statements (CLP) : P210 - Keep away from heat, sparks, open flames, hot surfaces. No smoking. P261 - Avoid breathing fume, gas, dust, vapours. P264 - Wash hands thoroughly after handling. P280 - Wear protective gloves, protective clothing, eye protection. P301+P310+P331 - IF SWALLOWED: Immediately call a POISON CENTER, a doctor. Do NOT induce vomiting. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse. P391 - Collect spillage.

### 2.3. Other hazards

No additional information available

## **SECTION 3: Composition/information on ingredients**

### 3.1. Substances

Name	: WHITE GRAPEFRUIT ORGANIC OIL
CAS-No.	: 8016-20-4
EC-No.	: 289-904-6

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
D-LIMONENE	CAS-No.: 5989-27-5 EC-No.: 227-813-5 EC Index-No.: 601-029-00-7	92 – 96	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
MYRCENE	CAS-No.: 123-35-3 EC-No.: 204-622-5	1.5 – 2.5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319
CITRAL	CAS-No.: 5392-40-5 EC-No.: 226-394-6	0.1 – 1	Skin Irrit. 2, H315 Skin Sens. 1, H317
LINALOOL	CAS-No.: 78-70-6 EC-No.: 201-134-4	≤ 1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
ALPHA-PINENES	CAS-No.: 80-56-8 EC-No.: 201-291-9	0.2 - 0.6	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-statements: see section 16

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

### 3.2. Mixtures

Not applicable

SECTION 4: First aid measures		
4.1. Description of first aid measures		
First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Call a physician immediately.	
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest.	
First-aid measures after skin contact	: Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash with plenty of water/ Wash contaminated clothing before reuse. If skin irritation occurs: Rinse skin with water/shower. Get medical advice/attention. Specific treatment (see Refer to instruction manual/booklet on this label). If skin irritation or rash occurs: Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention.	
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists. Rinse eyes with water as a precaution.	
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. Do not induce vomiting. Call a physician immediately.	
4.2. Most important symptoms and effects, both acute and delayed		
Symptoms/effects after inhalation Symptoms/effects after skin contact Symptoms/effects after ingestion	<ul> <li>May cause an allergic skin reaction.</li> <li>Causes skin irritation. Irritation. May cause an allergic skin reaction.</li> <li>May be fatal if swallowed and enters airways. Risk of lung oedema.</li> </ul>	

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 Unsuitable extinguishing media	<ul><li>Foam. Dry powder. Carbon dioxide. Water spray. Sand.</li><li>Do not use a heavy water stream.</li></ul>
5.2. Special hazards arising from the subst	tance or mixture
Fire hazard Explosion hazard Hazardous decomposition products in case of fire	<ul> <li>Flammable liquid and vapour.</li> <li>May form flammable/explosive vapour-air mixture.</li> <li>Toxic fumes may be released.</li> </ul>
5.3. Advice for firefighters	
Firefighting instructions Protection during firefighting	<ul> <li>Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.</li> <li>Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.</li> </ul>

SECTION 6: Accidental release measures			
6.1. Personal precautions, protective equip	ment and emergency procedures		
General measures	: Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.		

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

6.1.1. For non-emergency personnel	
Emergency procedures	: Ventilate spillage area. Evacuate unnecessary personnel. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. 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. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Ventilate area.
6.2. Environmental precautions	

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up		
For containment	: Collect spillage.	
Methods for cleaning up	<ul> <li>Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Notify authorities if product enters sewers or public waters.</li> </ul>	
Other information	: Dispose of materials or solid residues at an authorized site.	
6.4. Reference to other sections		

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Additional hazards when processed Precautions for safe handling Hygiene measures	<ul> <li>Handle empty containers with care because residual vapours are flammable.</li> <li>Ensure good ventilation of the work station. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. No open flames. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Avoid breathing smokes, vapours. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Avoid contact with skin and eyes.</li> <li>Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.</li> </ul>
7.2. Conditions for safe storage, includ	ling any incompatibilities
Technical measures	: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof ventilating equipment.
Storage conditions	<ul> <li>Keep only in the original container in a cool, well ventilated place away from : Heat sources, Direct sunlight. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.</li> </ul>
Incompatible products	: Strong bases. Strong acids.
Incompatible materials	: Sources of ignition. Direct sunlight. Heat sources.
Maximum storage period	: 12 months
Storage temperature	: ≤ 10 °C
7.3. Specific end use(s)	

No additional information available

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

### **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:

Avoid all unnecessary exposure. Personal protective equipment symbol(s):



#### 8.2.2.1. Eye and face protection

**Eye protection:** Chemical goggles or safety glasses. Safety glasses

### 8.2.2.2. Skin protection

Skin and body protection: Wear suitable protective clothing

Hand protection: Wear protective gloves.

#### 8.2.2.3. Respiratory protection

Respiratory protection: [In case of inadequate ventilation] wear respiratory protection.

8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

### **Environmental exposure controls:** Avoid release to the environment.

#### Other information:

Do not eat, drink or smoke during use.

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

SECTION 9: Physical and chemical properties			
9.1. Information on basic physical and chemical properties			
Physical state Colour	: Liquid : Colourless. Yellow. orange. amber.		
Appearance	: Liquid Clear. [May Contain precipitated waxes].		
Odour	: characteristic. pleasant fruity.		
Odour threshold	: Not available		
Melting point	: Not applicable		
Freezing point	: Not available		
Boiling point	: 171 °C		
Flammability	: Flammable liquid and vapour.		
Explosive limits	: Not available		
Lower explosive limit (LEL)	: Not available		
Upper explosive limit (UEL)	: Not available		
Flash point	: 43 °C		
Auto-ignition temperature	: Not available		
Decomposition temperature	: Not available		
рН	: Not available		
Viscosity, kinematic	: Not available		
Solubility	: Poorly soluble in water.		
Partition coefficient n-octanol/water (Log Kow)	: Not available		
Vapour pressure	: Not available		
Vapour pressure at 50 °C	: Not available		
Density	: Not available		
Relative density	: 0.841 – 0.86		
Relative vapour density at 20 °C	: Not available		
Particle size	: Not applicable		
Particle size distribution	: Not applicable		
Particle shape	: Not applicable		
Particle aspect ratio	: Not applicable		
Particle aggregation state	Not applicable		
Particle agglomeration state	: Not applicable		
Particle specific surface area	: Not applicable		
Particle dustiness	: 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

VOC content	: ~ 95 %
Refractive index	: 1.465 – 1.485

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Flammable liquid and vapour.

10.2. Chemical stability

Flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

## 10.3. Possibility of hazardous reactions

## Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks. Avoid contact with hot surfaces. No flames, no sparks. Eliminate all sources of ignition.

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

## **10.5. Incompatible materials**

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11: Toxicological information			
	ed in Regulation (EC) No 1272/2008		
11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008         Acute toxicity (oral)       : Not classified         Acute toxicity (dermal)       : Not classified         Acute toxicity (inhalation)       : Not classified			
WHITE GRAPEFRUIT ORGANIC OIL (8016-20-4)			
LD50 oral rat 5000 mg/kg			
LD50 dermal rabbit	5000 mg/kg		
D-LIMONENE (5989-27-5)			
LD50 oral rat	4400 mg/kg		
LD50 dermal rabbit	> 5000 mg/kg		
MYRCENE (123-35-3)			
LD50 oral rat > 5000 mg/kg			
LD50 dermal rabbit	> 5000 mg/kg		
LINALOOL (78-70-6)	1		
LD50 oral rat	2790 mg/kg		
LD50 oral	3120 mg/kg LD50 oral mouse		
LD50 dermal rabbit	5610 mg/kg		
ALPHA-PINENES (80-56-8)			
LD50 oral rat	3700 mg/kg		
LD50 dermal rabbit     > 5000 mg/kg			
CITRAL (5392-40-5)			
LD50 oral rat	4960 mg/kg		
LD50 oral	6000 mg/kg LD50 oral mouse		
LD50 dermal rabbit	2550 mg/kg		
Skin corrosion/irritation       :         Skin corrosion/irritation       :         Serious eye damage/irritation       :         Additional information       :         Respiratory or skin sensitisation       :         Germ cell mutagenicity       :         Additional information       :         Carcinogenicity       :         Additional information       :         D-LIMONENE (5989-27-5)	Causes skin irritation. Not classified Based on available data, the classification criteria are not met May cause an allergic skin reaction. Not classified Based on available data, the classification criteria are not met Not classified Based on available data, the classification criteria are not met		
	3 - Not classifiable		
IARC group         Reproductive toxicity       :         Additional information       :         STOT-single exposure       :	3 - Not classified         Based on available data, the classification criteria are not met         Not classified		

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Additional information STOT-repeated exposure Additional information Aspiration hazard	<ul> <li>Based on available data, the classification criteria are not met</li> <li>Not classified</li> <li>Based on available data, the classification criteria are not met</li> <li>May be fatal if swallowed and enters airways.</li> </ul>
11.2. Information on other hazards	
11.2.1. Endocrine disrupting properties	
11.2.2. Other information	
Potential adverse human health effects and	: Based on available data, the classification criteria are not met

Potential adverse hu
symptoms

## **SECTION 12: Ecological information**

12.1. Toxicity	
Ecology - water : Hazardous to the aquatic environment, short-term : (acute)	Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.
D-LIMONENE (5989-27-5)	
LC50 - Fish [1]	0.702 mg/l Pimephales promela (fathead minnow) -96h
EC50 - Crustacea [1]	69.6 daphnia - 48h
LINALOOL (78-70-6)	
LC50 - Fish [1]	27.8 mg/l EC 50 (fish : rainbow trout) : - 96h
LC50 - Other aquatic organisms [1]	88.3 mg/l Desmodesmus subspicatus (green algae) - 96h
EC50 - Crustacea [1]	59 mg/l EC50 48h - Daphnia magna [mg/l]
NOEC chronic fish	3.5 mg/l Oncorhynchus mykiss (Rainbow trout)- 96h
NOEC chronic crustacea	25 mg/l daphnia - 48h
ALPHA-PINENES (80-56-8)	
LC50 - Fish [1]	0.28 mg/l Pimephales promela (fathead minnow) - 96h
LC50 - Other aquatic organisms [1]	41 mg/l EC50 48h - Daphnia magna [mg/l]
12.2. Persistence and degradability	
WHITE GRAPEFRUIT ORGANIC OIL (8016-20-	4)
Persistence and degradability	May cause long-term adverse effects in the environment.
D-LIMONENE (5989-27-5)	
Persistence and degradability         May cause long-term adverse effects in the environment.	
MYRCENE (123-35-3)	
Persistence and degradability	Not established.
LINALOOL (78-70-6)	
Persistence and degradability	Readily biodegradable. Not established.
Biodegradation	100 % 13 DAYS- ZAHN-WELLENS TEST OECD N° 302 B

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

ALPHA-PINENES (80-56-8)			
Persistence and degradability Readily biodegradable. May cause long-term adverse effects in the environment.			
CITRAL (5392-40-5)			
Persistence and degradability Not established.			
12.3. Bioaccumulative potential			
WHITE GRAPEFRUIT ORGANIC OIL (8016-20-4)			
Bioaccumulative potential Not established.			
D-LIMONENE (5989-27-5)			
Bioaccumulative potential Not established.			
MYRCENE (123-35-3)			
Partition coefficient n-octanol/water (Log Kow) 4.17			
Bioaccumulative potential Not established.			
LINALOOL (78-70-6)			
Partition coefficient n-octanol/water (Log Pow) 2.97			
Bioaccumulative potential Not established.			
ALPHA-PINENES (80-56-8)			
Partition coefficient n-octanol/water (Log Pow) 4.834			
Bioaccumulative potential Not established.			
CITRAL (5392-40-5)			
Bioaccumulative potential Not established.			
12.4. Mobility in soil			
No dell'Alexand for former d'anne avec llade la			

No additional information available

 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

Additional information

: Avoid release to the environment.

SECTION 13: Disposal considerations		
13.1. Waste treatment methods		
Waste treatment methods Product/Packaging disposal recommendations	<ul> <li>Dispose of contents/container in accordance with licensed collector's sorting instructions.</li> <li>Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.</li> </ul>	
Additional information	: Handle empty containers with care because residual vapours are flammable. Flammable vapours may accumulate in the container.	
Ecology - waste materials	: Avoid release to the environment. Hazardous waste due to toxicity.	

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

SECTION 14: Transport information	
In accordance with ADR	
14.1. UN number or ID number	
UN-No. (ADR)	: UN 1169
14.2. UN proper shipping name	
Proper Shipping Name (ADR) Transport document description (ADR)	: EXTRACTS, AROMATIC, LIQUID : UN 1169 EXTRACTS, AROMATIC, LIQUID, 3, III, (D/E), ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)	
ADR Transport hazard class(es) (ADR) Danger labels (ADR)	$\begin{array}{c} 3\\ 3\\ \end{array}$
14.4. Packing group	
Packing group (ADR)	: 111
14.5. Environmental hazards	
Dangerous for the environment Other information	: Yes : No supplementary information available
14.6. Special precautions for user	
Overland transport Classification code (ADR) Special provisions (ADR) Limited quantities (ADR) Excepted quantities (ADR) Vehicle for tank carriage Transport category (ADR) Hazard identification number (Kemler No.) Orange plates	: F1 : 601, 640E : 5I : E1 : FL : 3 : 30 : 30 1169
Tunnel restriction code (ADR)	: D/E
14.7. Maritime transport in bulk accordin	g to IMO instruments

Not applicable

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

## **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 Entry title or description		
3.	WHITE GRAPEFRUIT ORGANIC OIL	Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	
40.	WHITE GRAPEFRUIT ORGANIC OIL	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.	

WHITE GRAPEFRUIT ORGANIC OIL is not on the REACH Candidate List

WHITE GRAPEFRUIT ORGANIC OIL is not on the REACH Annex XIV List

WHITE GRAPEFRUIT ORGANIC OIL is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 july 2012 concerning the export and import of hazardous chemicals.

WHITE GRAPEFRUIT ORGANIC OIL is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

VOC content

: ~ 95 %

### 15.1.2. National regulations

### Germany

Water hazard class (WGK)	:	WGK 1, Slightly hazardous to water
Hazardous Incident Ordinance (12. BImSchV)	:	Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

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	
BLV	Biological limit value	
CAS-No.	Chemical Abstract Service number	
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC50	Median effective concentration	
EC-No.	European Community number	
EN	European Standard	
ΙΑΤΑ	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Abbreviations and acronyms		
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OEL	Occupational Exposure Limit	
РВТ	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
vPvB	Very Persistent and Very Bioaccumulative	
WGK	Water Hazard Class	

Data sources

 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
 None.

Other information

Full text of H- and EUH-statements		
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1	
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1	
Asp. Tox. 1	Aspiration hazard, Category 1	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Flam. Liq. 3	Flammable liquids, Category 3	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
Skin Sens. 1	Skin sensitisation, Category 1	
H226	Flammable liquid and vapour.	
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.	

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.