## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006

Issue date: 10/21/2022 Revision date: 2/28/2025 Supersedes version of: 1/24/2024 Version: 3.0

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

# 1.1. Product identifier

Product form : Mixture

Product name : A&L ULTIMATE KAMI ORIGINAL SWEET EDITION

UFI : 79P6-J02E-6E9R-Y8FP

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

Relevant identified uses

Main use category : Consumer use

## 1.3. Details of the supplier of the safety data sheet

Comunica Concept SAS 405 rue Jacques de Lesseps FR 42160 Andrézieux Bouthéon France

T+33 4.77.40.09.71

contact@aromes-et-liquides.fr

#### 1.4. Emergency telephone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
France	ORFILA		+33 1 45 42 59 59	This number provides contact details for all French anti-poison centres. These anti-poison and toxicovigilance centres provide free medical assistance (excluding call costs), 24 hours a day, 7 days a week.

#### **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
Serious eye damage/eye irritation, Category 2 H319
Skin sensitisation, Category 1 H317

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

Adverse physicochemical, human health and environmental effects

Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.

# 2.2. Label elements

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

Hazard pictograms (CLP)



GHS02 GHS07

Signal word (CLP) : Warning

Contains : d-Limonene; Furaneol; Methyl cinnamate Hazard statements (CLP) : H226 - Flammable liquid and vapour.

H315 - Causes skin irritation.

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

Precautionary statements (CLP) : P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P264 - Wash hands thoroughly after handling.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P501 - Dispose of contents/container in accordance with regulations.

# 2.3. Other hazards

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

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

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

# 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-isopropyl-N,2,3-trimethylbutyramide	CAS-No.: 51115-67-4 EC-No.: 256-974-4	5 – 7	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight)
Furaneol / 4-Hydroxy-2,5-dimethyl-3(2H)-furanone	CAS-No.: 3658-77-3 EC-No.: 222-908-8	2 – 3	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Skin Corr. 1, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317
Ethyl butyrate	CAS-No.: 105-54-4 EC-No.: 203-306-4	2-3	Flam. Liq. 3, H226 Eye Irrit. 2, H319
Ethyl maltol	CAS-No.: 4940-11-8 EC-No.: 225-582-5	1-2	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight)
isobutyl acetate substance with national workplace exposure limit(s) (FR); substance with a Community workplace exposure limit	CAS-No.: 110-19-0 EC-No.: 203-745-1 EC Index-No.: 607-026-00-7	1-2	Flam. Liq. 2, H225 STOT SE 3, H336
Methyl cinnamate	CAS-No.: 103-26-4 EC-No.: 203-093-8	0.5 – 1	Skin Sens. 1, H317
isopentyl acetate substance with national workplace exposure limit(s) (FR); substance with a Community workplace exposure limit	CAS-No.: 123-92-2 EC-No.: 204-662-3 EC Index-No.: 607-130-00-2 REACH-no: 01-2119548408- 32	0.5 – 1	Flam. Liq. 3, H226 EUH066
Acetic acid substance with national workplace exposure limit(s) (FR); substance with a Community workplace exposure limit	CAS-No.: 64-19-7 EC-No.: 200-580-7 EC Index-No.: 607-002-00-6	0.5 – 1	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 (ATE=1060 mg/kg bodyweight) Skin Corr. 1A, H314 Eye Dam. 1, H318
Propionic acid substance with national workplace exposure limit(s) (FR); substance with a Community workplace exposure limit	CAS-No.: 79-09-4 EC-No.: 201-176-3 EC Index-No.: 607-089-00-0	0.5 – 1	Flam. Liq. 3, H226 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
ethyl acetate substance with national workplace exposure limit(s) (FR); substance with a Community workplace exposure limit	CAS-No.: 141-78-6 EC-No.: 205-500-4 EC Index-No.: 607-022-00-5	0.1 – 0.5	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066
d-limonene/ (R)-p-mentha-1,8-diene	CAS-No.: 5989-27-5 EC-No.: 227-813-5 EC Index-No.: 601-096-00-2	0.1 - 0.9	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 3, H412
2-methylpropan-1-ol/ iso-butanol substance with national workplace exposure limit(s) (FR)	CAS-No.: 78-83-1 EC-No.: 201-148-0 EC Index-No.: 603-108-00-1	< 0.1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H336 STOT SE 3, H335
Isoamyl alcohol substance with national workplace exposure limit(s) (FR); substance with a Community workplace exposure limit	CAS-No.: 123-51-3 EC-No.: 204-633-5	< 0.1	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335

Specific concentration limits:					
Name	Product identifier	Specific concentration limits (%)			
Acetic acid	CAS-No.: 64-19-7 EC-No.: 200-580-7 EC Index-No.: 607-002-00-6	$(10 \le C < 25)$ Skin Irrit. 2; H315 $(10 \le C < 25)$ Eye Irrit. 2; H319 $(25 \le C < 90)$ Skin Corr. 1B; H314 $(90 \le C \le 100)$ Skin Corr. 1A; H314			
Propionic acid	CAS-No.: 79-09-4 EC-No.: 201-176-3 EC Index-No.: 607-089-00-0	$(10 \le C < 25)$ Skin Irrit. 2; H315 $(10 \le C < 25)$ Eye Irrit. 2; H319 $(10 \le C \le 100)$ STOT SE 3; H335 $(25 \le C \le 100)$ Skin Corr. 1B; H314			

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

# **SECTION 4: First aid measures**

# 4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin

irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

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

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

Symptoms/effects after inhalation : None under normal conditions.

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

Symptoms/effects after eye contact : Eye irritation.

Symptoms/effects after ingestion : None under normal conditions.

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

Treat symptomatically.

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006

## **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

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

Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapour.

Explosion hazard : No direct explosion hazard.

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

#### 5.3. Advice for firefighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without

proper protective equipment, including respiratory protection.

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

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters.

Absorb spillage to prevent material damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with

skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

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".

Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

## 6.2. Environmental precautions

Avoid release to the environment.

# 6.3. Methods and material for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents

to prevent migration and entry into sewers or streams. Stop leak without risks if

possible.

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers

or public waters.

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

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal

use.

Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks,

open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Avoid contact with skin and

eyes. 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.

2/28/2025 (Revision date) GB - en 4/20

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006

# 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed.

Packaging materials : Store always product in container of same material as original container.

# 7.3. Specific end use(s)

No additional information available

# **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters

National occupational exposure and biological limit values

Acetic acid (64-19-7)				
EU - Indicative Occupational Exposure Limit (IOEL)				
Local name	Acetic acid			
IOEL TWA	25 mg/m³			
	10 ppm			
IOEL STEL	50 mg/m <sup>3</sup>			
	20 ppm			
Regulatory reference	COMMISSION DIRECTIVE (EU) 2017/164			
Isoamyl alcohol (123-51-3)				
EU - Indicative Occupational Exposure Limit (IOEL)				
Local name	Isoamyl alcohol			
IOEL TWA	18 mg/m³			
	5 ppm			
IOEL STEL	37 mg/m³			
	10 ppm			
Regulatory reference	COMMISSION DIRECTIVE (EU) 2019/1831			
isopentyl acetate (123-92-2)				
EU - Indicative Occupational Exposure Limit (IOEL)				
Local name	Isopentylacetate			
IOEL TWA	270 mg/m³			
	50 ppm			
IOEL STEL	540 mg/m³			
	100 ppm			
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC			
Propionic acid (79-09-4)				
EU - Indicative Occupational Exposure Limit (IOEL)				
Local name	Propionic acid			
IOEL TWA	31 mg/m <sup>3</sup>			
	10 ppm			
IOEL STEL	62 mg/m³			
	20 ppm			

2/28/2025 (Revision date) GB - en 5/20

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006

Propionic acid (79-09-4)			
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC		
isobutyl acetate (110-19-0)			
EU - Indicative Occupational Exposure Limit (IOEL)			
Local name	Isobutyl acetate		
IOEL TWA	241 mg/m³		
	50 ppm		
IOEL STEL	723 mg/m³		
	150 ppm		
Regulatory reference	COMMISSION DIRECTIVE (EU) 2019/1831		
ethyl acetate (141-78-6)			
EU - Indicative Occupational Exposure Limit (IOEL)			
Local name	Ethyl acetate		
IOEL TWA	734 mg/m³		
	200 ppm		
IOEL STEL	1468 mg/m³		
	400 ppm		
Regulatory reference	COMMISSION DIRECTIVE (EU) 2017/164		
8.2. Exposure controls			

#### 8.2. Exposure controls

# Appropriate engineering controls

# Appropriate engineering controls:

 $\label{thm:equiv} \textbf{Ensure good ventilation of the work station.}$ 

# Personal protection equipment

# Personal protective equipment:

Wear recommended personal protective equipment.

## Personal protective equipment symbol(s):







## Eye and face protection

## Eye protection:

Safety glasses

#### Skin protection

# Skin and body protection:

Wear suitable protective clothing

## Hand protection:

Protective gloves

# **Respiratory protection**

#### **Respiratory protection:**

In case of insufficient ventilation, wear suitable respiratory equipment

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006

#### **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 : Pink.

Odour : Characteristic.
Odour threshold : Not available
Melting point : Not applicable
Freezing point : Not available
Boiling point : Not available

Flammability : Flammable liquid and vapour.

Lower explosion limit : Not available Upper explosion limit : Not available

Flash point : 45 °C

: Not available Auto-ignition temperature Decomposition temperature : Not available рΗ : 3.1(2.1 - 4.1)Viscosity, kinematic : Not available Solubility : 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 : 1.04 (1.02 - 1.06) Relative vapour density at 20°C : Not available

## 9.2. Other information

Particle characteristics

No additional information available

# **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

Flammable liquid and vapour.

#### 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

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

# 10.5. Incompatible materials

No additional information available

# 10.6. Hazardous decomposition products

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

# **SECTION 11: Toxicological information**

## 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)

: Not applicable

2/28/2025 (Revision date) GB - en 7/20

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006

Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)

Acute toxicity (inhalation)	Not classified (Based on available data, the classification criteria are not met)
Acetic acid (64-19-7)	
LD50 oral rat	3310 mg/kg bodyweight Animal: rat
LD50 oral	4960 mg/kg bodyweight Animal: mouse
LD50 dermal rabbit	1060 mg/kg Source: HSDB, NITE
LC50 Inhalation - Rat [ppm]	16000 ppm Source: ChemIDPlus
Isoamyl alcohol (123-51-3)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	≈ 3216 mg/kg bodyweight Animal: rabbit, Animal sex: male, 95% CL: 2373 - 4350
LC50 Inhalation - Rat (Vapours)	10 mg/l Source: ECHA
2-methylpropan-1-ol/ iso-butanol (78-83-1)	
LD50 oral rat	2460 mg/kg Source: ECHA
LD50 dermal rabbit	2460 mg/kg Source: ECHA
LC50 Inhalation - Rat (Vapours)	19.6 mg/l Source: ECHA
isopentyl acetate (123-92-2)	
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit
Propionic acid (79-09-4)	
LD50 oral rat	3455.1 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 2978,9 - 4007,5
LD50 dermal rat	3235 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal rabbit	3235 mg/kg Source: ECHA
LC50 Inhalation - Rat	> 20 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
LC50 Inhalation - Rat (Vapours)	> 20 mg/l Source: ECHA
Ethyl butyrate (105-54-4)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method), Remarks on results: other:
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Remarks on results: other:
LD50 dermal rabbit	> 2000 mg/kg Source: NLM
LC50 Inhalation - Rat [ppm]	> 4000 ppm Animal: rat, Guideline: other:, Remarks on results: other:
Ethyl maltol (4940-11-8)	
LD50 oral rat	≈ 1220 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1000 - 1440
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Remarks on results: no indication of skin irritation up to the relevant limit dose level
isobutyl acetate (110-19-0)	
LD50 oral rat	13413 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity)

2/28/2025 (Revision date) GB - en 8/20

# Safety Data Sheet

Guideline 402 (Acut  LC50 Inhalation - Rat	nal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
LC50 Inhalation - Rat (Vapours)  d-limonene/ (R)-p-mentha-1,8-diene (5989-27-5)  LD50 oral rat  > 2000 mg/kg bodyw 423 (Acute Oral toxidate)  LD50 dermal rabbit  > 5000 mg/kg Source  Furaneol / 4-Hydroxy-2,5-dimethyl-3(2H)-furanone (3658-77-3)  LD50 oral rat  2320 mg/kg bodyw Toxicity)  Methyl cinnamate (103-26-4)  LD50 oral rat  2610 mg/kg bodyw Toxicity), 95% CL: 2000 mg/kg bodyw Dermal Toxicity)  ethyl acetate (141-78-6)  LD50 oral  4934 mg/kg bodyw Toxicity)  LD50 dermal rabbit  > 20000 mg/kg bodyw Toxicity)  LD50 oral  4934 mg/kg bodyw Toxicity)  LD50 dermal rabbit  > 20000 mg/kg bodyw Toxicity)	weight Animal: rat, Animal sex: female, Guideline: OECD Guideline icity - Acute Toxic Class Method) e: National Library of Medicine
d-limonene/ (R)-p-mentha-1,8-diene (5989-27-5)  LD50 oral rat	weight Animal: rat, Animal sex: female, Guideline: OECD Guideline icity - Acute Toxic Class Method) e: National Library of Medicine
LD50 oral rat  > 2000 mg/kg bodyd 423 (Acute Oral toxicity)  Furaneol / 4-Hydroxy-2,5-dimethyl-3(2H)-furanone (3658-77-3)  LD50 oral rat  2320 mg/kg bodywd Toxicity)  Methyl cinnamate (103-26-4)  LD50 oral rat  2610 mg/kg bodywd Toxicity), 95% CL: 20  LD50 dermal rabbit  > 5000 mg/kg bodywd Toxicity)  ethyl acetate (141-78-6)  LD50 oral  4934 mg/kg bodywd Toxicity)  LD50 dermal rabbit  > 20000 mg/kg bodywd Toxicity)  LD50 oral  4934 mg/kg bodywd Toxicity)	icity - Acute Toxic Class Method) e: National Library of Medicine
LD50 dermal rabbit > 5000 mg/kg Source  Furaneol / 4-Hydroxy-2,5-dimethyl-3(2H)-furanone (3658-77-3)  LD50 oral rat 2320 mg/kg bodywe Toxicity)  Methyl cinnamate (103-26-4)  LD50 oral rat 2610 mg/kg bodywe Toxicity), 95% CL: 20  LD50 dermal rabbit > 5000 mg/kg bodywe Toxicity)  ethyl acetate (141-78-6)  LD50 oral 4934 mg/kg bodywe Toxicity)  LD50 dermal rabbit > 20000 mg/kg bodywe Toxicity)	icity - Acute Toxic Class Method) e: National Library of Medicine
Furaneol / 4-Hydroxy-2,5-dimethyl-3(2H)-furanone (3658-77-3)  LD50 oral rat  2320 mg/kg bodywa Toxicity)  Methyl cinnamate (103-26-4)  LD50 oral rat  2610 mg/kg bodywa Toxicity), 95% CL: 20  LD50 dermal rabbit  > 5000 mg/kg bodywa Dermal Toxicity)  ethyl acetate (141-78-6)  LD50 oral  4934 mg/kg bodywa Toxicity)  LD50 dermal rabbit  > 20000 mg/kg bodywa Toxicity)	
LD50 oral rat  2320 mg/kg bodywe Toxicity)  Methyl cinnamate (103-26-4)  LD50 oral rat  2610 mg/kg bodywe Toxicity), 95% CL: 20  LD50 dermal rabbit  > 5000 mg/kg bodywe Dermal Toxicity)  ethyl acetate (141-78-6)  LD50 oral  4934 mg/kg bodywe Toxicity)  LD50 dermal rabbit  > 20000 mg/kg bodywe Toxicity)	eight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral
Methyl cinnamate (103-26-4)  LD50 oral rat  2610 mg/kg bodywe Toxicity), 95% CL: 20  LD50 dermal rabbit  > 5000 mg/kg bodywe Dermal Toxicity)  ethyl acetate (141-78-6)  LD50 oral  4934 mg/kg bodywe Toxicity)  LD50 dermal rabbit  > 20000 mg/kg bodywe Toxicity)	eight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral
LD50 oral rat  2610 mg/kg bodywo Toxicity), 95% CL: 20 LD50 dermal rabbit  > 5000 mg/kg bodywo Dermal Toxicity)  ethyl acetate (141-78-6)  LD50 oral  4934 mg/kg bodywo Toxicity)  LD50 dermal rabbit  > 20000 mg/kg bodywo Toxicity)	
Toxicity), 95% CL: 26  LD50 dermal rabbit > 5000 mg/kg bodyn Dermal Toxicity)  ethyl acetate (141-78-6)  LD50 oral 4934 mg/kg bodyne Toxicity)  LD50 dermal rabbit > 20000 mg/kg body	
ethyl acetate (141-78-6)  LD50 oral 4934 mg/kg bodywa Toxicity)  LD50 dermal rabbit > 20000 mg/kg body	eight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral 2000 - 3410
LD50 oral 4934 mg/kg bodywa Toxicity)  LD50 dermal rabbit > 20000 mg/kg body	weight Animal: rabbit, Guideline: OECD Guideline 402 (Acute
LD50 dermal rabbit	
	eight Animal: rabbit, Guideline: OECD Guideline 401 (Acute Oral
	yweight Animal: rabbit, Animal sex: male
Skin corrosion/irritation : Causes skin irritation	
pH: 3.1 (2.1 – 4.1)	
Acetic acid (64-19-7)	
pH 2.4 Source: ECHA	
Ethyl butyrate (105-54-4)	
pH 4.18 Temp.: 29 °C C	oncentration: 1 other:
isobutyl acetate (110-19-0)	
pH 6.7 Temp.: 20 °C Co	ncentration: (≈)5 g/L
Methyl cinnamate (103-26-4)	
pH 4.6 Temp.: 20 °C Co	ncentration: 299 mg/L
Serious eye damage/irritation : Causes serious eye in	ritation.
pH: 3.1 (2.1 – 4.1)	
Acetic acid (64-19-7)	
pH 2.4 Source: ECHA	
Ethyl butyrate (105-54-4)	
pH 4.18 Temp.: 29 °C C	oncentration: 1 other:
isobutyl acetate (110-19-0)	
pH 6.7 Temp.: 20 °C Co	
Methyl cinnamate (103-26-4)	ncentration: (≈)5 g/L
pH 4.6 Temp.: 20 °C Co	ncentration: (≈)5 g/L

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006

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

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

d-limonene/(R)-p-mentha-1,8-diene (5989-27-5)

IARC group 3 - Not classifiable

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)

d-limonene/ (R)-p-mentha-1,8-diene (5989-27-5)

NOAEL (animal/female, F0/P) 600 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: other:

Furaneol / 4-Hydroxy-2,5-dimethyl-3(2H)-furanone (3658-77-3)

NOAEL (animal/male, F0/P) 1000 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: other:

STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)

Isoamyl alcohol (123-51-3)

STOT-single exposure May cause respiratory irritation.

2-methylpropan-1-ol/iso-butanol (78-83-1)

STOT-single exposure May cause drowsiness or dizziness. May cause respiratory irritation.

Propionic acid (79-09-4)

STOT-single exposure May cause respiratory irritation.

isobutyl acetate (110-19-0)

STOT-single exposure May cause drowsiness or dizziness.

ethyl acetate (141-78-6)

STOT-single exposure May cause drowsiness or dizziness.

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)

Acetic acid (64-19-7)

NOAEL (oral, rat, 90 days) 290 mg/kg bodyweight Animal: rat, Animal sex: male

Isoamyl alcohol (123-51-3)

NOAEL (oral, rat, 90 days)

1250 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline
408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

2-methylpropan-1-ol/iso-butanol (78-83-1)

NOAEL (oral, rat, 90 days) > 1450 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)

isopentyl acetate (123-92-2)

NOAEL (subchronic, oral, animal/female, 90 days) 443.07 mg/kg bodyweight Animal: , Animal sex: female

Ethyl maltol (4940-11-8)

NOAEL (oral, rat, 90 days) ≥ 200 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

isobutyl acetate (110-19-0)

NOAEL (oral, rat, 90 days)

316 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006

ethyl acetate (141-78-6)				
LOAEL (oral, rat, 90 days)	3600 mg/kg bodyweight Animal: rat, Guideline: EPA OTS 795.2600 (Subchronic Oral Toxicity Test)			
NOAEL (oral, rat, 90 days)	900 mg/kg bodyweight Animal: rat, Guideline: EPA OTS 795.2600 (Subchronic Oral Toxicity Test)			
Aspiration hazard :	Not classified (Based on available data, the classification criteria are not met)			
Acetic acid (64-19-7)				
Viscosity, kinematic	1.015 mm <sup>2</sup> /s			
Isoamyl alcohol (123-51-3)				
Viscosity, kinematic	5.32 mm²/s Temp.: '20°C' Parameter: 'kinematic viscosity (in mm²/s)'			
2-methylpropan-1-ol/ iso-butanol (78-83-1)				
/iscosity, kinematic 38702.757 mm²/s				
2-isopropyl-N,2,3-trimethylbutyramide (51115-67-4)				
Viscosity, kinematic	Not applicable			
isopentyl acetate (123-92-2)				
Viscosity, kinematic	1.176 mm²/s			
Ethyl butyrate (105-54-4)				
Viscosity, kinematic	0.82 mm <sup>2</sup> /s			
isobutyl acetate (110-19-0)				
Viscosity, kinematic	0.803 mm <sup>2</sup> /s			
d-limonene/ (R)-p-mentha-1,8-diene (5989-27-	5)			
Viscosity, kinematic	1.075 mm²/s			
11.2. Information on other hazards				

No additional information available

# **SECTION 12: Ecological information**

_	-	-			
		.1.			

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short— : Not classified (Based on available data, the classification criteria are not met) term (acute)

Hazardous to the aquatic environment, long— : Not classified (Based on available data, the classification criteria are not met) term (chronic)

Acetic acid (64-19-7)	
LC50 - Fish [1]	> 1000 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
LC50 - Fish [2]	> 300.82 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	> 1000 mg/l Test organisms (species): Daphnia magna
EC50 - Crustacea [2]	> 300.82 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 1000 mg/l Test organisms (species): Skeletonema costatum
EC50 72h - Algae [2]	> 300.82 mg/l Test organisms (species): Skeletonema costatum

# Safety Data Sheet

LC50 - Fish [1] 700 m			
gairdr	ng/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo neri)		
EC50 - Crustacea [1] 255 m	ng/l Test organisms (species): Daphnia magna		
_	mg/I Test organisms (species): Desmodesmus subspicatus (previous name: desmus subspicatus)		
	ng/l Test organisms (species): Desmodesmus subspicatus (previous name: desmus subspicatus)		
	ng/l Test organisms (species): Desmodesmus subspicatus (previous name: desmus subspicatus)		
	ng/l Test organisms (species): Desmodesmus subspicatus (previous name: desmus subspicatus)		
2-methylpropan-1-ol/ iso-butanol (78-83-1)			
LC50 - Fish [1] 1430	mg/l Test organisms (species): Pimephales promelas		
EC50 - Crustacea [1] 1100	mg/l Test organisms (species): Daphnia pulex		
EC50 72h - Algae [1] 593 m	ng/l Source: ECHA		
NOEC (chronic) 20 mg	;/I Test organisms (species): Daphnia magna Duration: '21 d'		
2-isopropyl-N,2,3-trimethylbutyramide (51115-67-4)			
EC50 - Crustacea [1] > 100	mg/l Test organisms (species): Daphnia magna		
	mg/l Test organisms (species): Raphidocelis subcapitata (previous names: okirchneriella subcapitata, Selenastrum capricornutum)		
isopentyl acetate (123-92-2)			
LC50 - Fish [1] 22 – 4	6 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)		
EC50 - Crustacea [1] 42 mg	;/I Test organisms (species): other:Daphnia magna STRAUS		
Propionic acid (79-09-4)			
LC50 - Fish [1] > 1000	00 mg/l Test organisms (species): Leuciscus idus		
EC50 - Crustacea [1] > 500	mg/l Test organisms (species): Daphnia magna		
	mg/l Test organisms (species): Desmodesmus subspicatus (previous name: desmus subspicatus)		
Ethyl butyrate (105-54-4)			
LC50 - Fish [1] 4.6 m <sub>i</sub>	g/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)		
EC50 - Crustacea [1] 116.6	mg/l Test organisms (species): Daphnia magna		
EC50 96h - Algae [1] 1.675	mg/l Source: ECOSAR		
NOEC (chronic) 28833	mg/l Test organisms (species): Daphnia magna Duration: '21 d'		
NOEC chronic fich	mg/l Test organisms (species): other: Duration: '28 d'		
NOEC chronic fish 1483	Ethyl maltol (4940-11-8)		
Ethyl maltol (4940-11-8)	ng/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo neri)		
Ethyl maltol (4940-11-8)  LC50 - Fish [1] > 85 n gairdr			
Ethyl maltol (4940-11-8)         LC50 - Fish [1]       > 85 n gairdr         EC50 - Crustacea [1]       27 mg         EC50 72h - Algae [1]       7.2 mg	eri)		

# Safety Data Sheet

isobutyl acetate (110-19-0)	
LC50 - Fish [1]	17 mg/l Test organisms (species): Oryzias latipes
EC50 - Crustacea [1]	25 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	370 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	250 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
ErC50 algae	397 mg/l Source: ECHA
LOEC (chronic)	47.6 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	23 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
d-limonene/ (R)-p-mentha-1,8-diene (5989-27-	5)
LC50 - Fish [1]	720 μg/l Test organisms (species): Pimephales promelas
LC50 - Fish [2]	702 μg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	0.36 mg/l
EC50 - Crustacea [2]	0.51 mg/l
EC50 72h - Algae [1]	0.32 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	0.214 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
NOEC (chronic)	0.115 mg/l Test organisms (species): other:For freshwater invertebrates, species frequently include Daphnia magna or Daphnia pulex. Duration: '16 d'
Furaneol / 4-Hydroxy-2,5-dimethyl-3(2H)-furanone (3658-77-3)	
LC50 - Fish [1]	1.887 mg/l Source: Ecological Structure Activity Relationships
EC50 - Crustacea [1]	6.8 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	194.03 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 96h - Algae [1]	96.963 mg/l Source: Ecological Structure Activity Relationships
Methyl cinnamate (103-26-4)	
LC50 - Fish [1]	2.76 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	24 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	7.6 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	1.08 mg/l Source: ECOSAR
ethyl acetate (141-78-6)	
LC50 - Fish [1]	230 mg/l Test organisms (species): Pimephales promelas
NOEC (chronic)	2.4 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
12.2. Persistence and degradability	
A&L ULTIMATE KAMI ORIGINAL SWEET EDITIO	N
Persistence and degradability	Not rapidly degradable
Acetic acid (64-19-7)	
Accide dela (04 15 7)	

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006

Isoamyl alcohol (123-51-3)	
Persistence and degradability	Not rapidly degradable
2-methylpropan-1-ol/ iso-butanol (78-83-1)	
Persistence and degradability	Not rapidly degradable
2-isopropyl-N,2,3-trimethylbutyramide (51115-	-67-4)
Persistence and degradability	Not rapidly degradable
isopentyl acetate (123-92-2)	
Persistence and degradability	Not rapidly degradable
Propionic acid (79-09-4)	
Persistence and degradability	Not rapidly degradable
Ethyl butyrate (105-54-4)	
Persistence and degradability	Not rapidly degradable
Ethyl maltol (4940-11-8)	
Persistence and degradability	Not rapidly degradable
isobutyl acetate (110-19-0)	
Persistence and degradability	Not rapidly degradable
d-limonene/ (R)-p-mentha-1,8-diene (5989-27-	5)
Persistence and degradability	Not rapidly degradable
Furaneol / 4-Hydroxy-2,5-dimethyl-3(2H)-furan	one (3658-77-3)
Persistence and degradability	Not rapidly degradable
Methyl cinnamate (103-26-4)	
Persistence and degradability	Not rapidly degradable
ethyl acetate (141-78-6)	
Persistence and degradability	Not rapidly degradable
12.3. Bioaccumulative potential	
Acetic acid (64-19-7)	
Partition coefficient n-octanol/water (Log Pow)	-0.17 Source: ECHA
Isoamyl alcohol (123-51-3)	
Partition coefficient n-octanol/water (Log Pow)	1.16 Source: HSDB
2-methylpropan-1-ol/ iso-butanol (78-83-1)	
Partition coefficient n-octanol/water (Log Pow)	0.8 Source: ChemIDPlus
isopentyl acetate (123-92-2)	
Partition coefficient n-octanol/water (Log Pow)	2.13 Source: ICSC
Propionic acid (79-09-4)	
Partition coefficient n-octanol/water (Log Pow)	0.33 Source: HSDB
Ethyl butyrate (105-54-4)	
Partition coefficient n-octanol/water (Log Pow)	2.85

2/28/2025 (Revision date) GB - en 14/20

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006

Ethyl maltol (4940-11-8)		
Partition coefficient n-octanol/water (Log Pow) 0.63 Source: NITE		
isobutyl acetate (110-19-0)		
Partition coefficient n-octanol/water (Log Pow) 1.6 Source: ICSC		
d-limonene/ (R)-p-mentha-1,8-diene (5989-27-5)		
Partition coefficient n-octanol/water (Log Pow) 4.38 Source: ECHA Registered substances		
Furaneol / 4-Hydroxy-2,5-dimethyl-3(2H)-furanone (3658-77-3)		
Partition coefficient n-octanol/water (Log Pow)  0.82 Source: Quantitative Structure Activity Relation		
Methyl cinnamate (103-26-4)		
Partition coefficient n-octanol/water (Log Pow) 2.18		
12.4. Mobility in soil		
Ethyl maltol (4940-11-8)		
Mobility in soil	9.271 Source: EPISUITE	

1.072 Source: Quantitative Structure Activity Relation

# 12.5. Results of PBT and vPvB assessment

Furaneol / 4-Hydroxy-2,5-dimethyl-3(2H)-furanone (3658-77-3)

No additional information available

#### 12.6. Endocrine disrupting properties

No additional information available

## 12.7. Other adverse effects

Mobility in soil

No additional information available

# **SECTION 13: Disposal considerations**

# 13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.

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

instructions.

Sewage disposal recommendations : Disposal must be done according to official regulations.

Product/Packaging disposal recommendations : Disposal must be done according to official regulations.

Additional information : Flammable vapours may accumulate in the container. Do not re-use empty containers.

#### **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA

ADR	IMDG	IATA
14.1. UN number or ID number		
UN 1197 UN 1197 UN 1197		UN 1197
14.2. UN proper shipping name		
EXTRACTS, LIQUID Extracts, liquid		Extracts, liquid
Transport document description		
UN 1197 EXTRACTS, LIQUID, 3, III, (D/E) UN 1197 EXTRACTS, LIQUID, 3, III UN 1197 Extracts, liquid		UN 1197 Extracts, liquid, 3, III
14.3. Transport hazard class(es)		
3	3	3

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006

ADR	IMDG	IATA
3	3	3
14.4. Packing group		
Ш	III	III
14.5. Environmental hazards		
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No EmS-No. (Fire): F-E EmS-No. (Spillage): S-D	Dangerous for the environment: No

# 14.6. Special precautions for user

## **Overland transport**

Classification code (ADR) : F1
Special provisions (ADR) : 601
Limited quantities (ADR) : 51
Excepted quantities (ADR) : E1

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

Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions : T2

(ADR)

Portable tank and bulk container special

provisions (ADR)

Tank code (ADR) : LGBF
Vehicle for tank carriage : FL
Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V12
Special provisions for carriage - Operation (ADR) : S2
Hazard identification number (Kemler No.) : 30

Orange plates :

30 1197

: TP1

Tunnel restriction code (ADR) : D/E EAC code : 3Y

# Transport by sea

Special provisions (IMDG): 223, 955Limited quantities (IMDG): 5 LExcepted quantities (IMDG): E1Packing instructions (IMDG): P001, LP01

IBC packing instructions (IMDG) : IBC03
Tank instructions (IMDG) : T2
Tank special provisions (IMDG) : TP1
Stowage category (IMDG) : A

Properties and observations (IMDG) : Usually consist of alcoholic solutions. Miscibility with water depends upon the

composition.

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006

#### Air transport

PCA Excepted quantities (IATA) : E1 PCA Limited quantities (IATA) : Y344 PCA limited quantity max net quantity (IATA) : 10L PCA packing instructions (IATA) : 355 PCA max net quantity (IATA) : 60L CAO packing instructions (IATA) : 366 CAO max net quantity (IATA) : 2201 Special provisions (IATA) : A3 ERG code (IATA) : 3L

#### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

# **SECTION 15: Regulatory information**

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

#### **EU-Regulations**

#### **REACH Annex XVII (Restriction List)**

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

#### **REACH Annex XIV (Authorisation List)**

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

#### **REACH Candidate List (SVHC)**

Contains no substance(s) listed on the REACH Candidate List

#### **PIC Regulation (Prior Informed Consent)**

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

#### **POP Regulation (Persistent Organic Pollutants)**

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

#### Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

# Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

# 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)

# 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

# Abbreviations and acronyms: ACGIH American Conference of Government Industrial Hygienists 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

# Safety Data Sheet

Abbreviations and acronyms:	
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	Chemical oxygen demand (COD)
CSA	Chemical safety assessment
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
ED	Endocrine disruptor
EN	European Standard
EWC	European waste catalogue
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
Log Kow	Partition coefficient n-octanol/water (Log Kow)
Log Pow	Partition coefficient n-octanol/water (Log Pow)
MAK	maximum workplace concentration
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
N.O.S.	Not Otherwise Specified
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
OSHA	Occupational Safety Health Administration
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
PPE	Personal protection equipment
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS :	Safety Data Sheet
STP :	Sewage treatment plant
TF ·	Technical function
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
TWA	Time Weighted Average

# Safety Data Sheet

Abbreviations and acronyms:	
voc	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative
UFI	Unique Formula Identifier

Flam. Liq. 2 Flammable liquids, Category 2 Flam. Liq. 3 Flammable liquids, Category 3 Skin Corr. 1 Skin Corr. 1 Skin corrosion/irritation, Category 1, Sub-Category 1A Skin Corr. 1B Skin corrosion/irritation, Category 1, Sub-Category 1B Skin Irrit. 2 Skin corrosion/irritation, Category 2 Skin Sens. 1 Skin sensitisation, Category 1 Skin Sens. 1 Skin sensitisation, Category 1 Skin Sens. 1A Skin sensitisation, category 1B STOT SE 3 Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation H225 Highly flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H315 Causes severe skin burns and eye damage. H316 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage.		
Acute Tox. 4 (Inhalation) Acute toxicity (Inhal.), Category 4 Acute Tox. 4 (Oral) Acute toxicity (oral), Category 4 Aquatic Acute 1 Aquatic Acute 1 Aquatic Chronic 3 App. Tox. 1 Aspiration hazard, Category 1 Aspiration hazard, Category 1 Eye Dam. 1 Eye Irrit. 2 Serious eye damage/eye irritation, Category 2 Flam. Liq. 2 Flammable liquids, Category 3 Skin Corr. 1 Skin Corr. 1 Skin corrosion/irritation, Category 1, Sub-Category 1A Skin Corr. 1 Skin corrosion/irritation, Category 1, Sub-Category 1B Skin Irrit. 2 Skin corrosion/irritation, Category 1, Sub-Category 1B Skin Sens. 1 Skin sens. 1 Skin sensitisation, Category 1 Skin sensitisation, category 1 Skin sens. 1 Skin sensitisation, category 1 Skin sens. 1 Skin sensitisation, category 1 Skin sens. 1 Skin sens. 1 Skin sensitisation, category 1 Skin sens.		-statements:
Acute Tox. 4 (Oral) Acute toxicity (oral), Category 4 Aquatic Acute 1 Aquatic Acute 1 Aquatic Chronic 3 Asp. Tox. 1 Aspiration hazard, Category 1 Eye Dam. 1 Eye Dam. 1 Serious eye damage/eye irritation, Category 2 Flam. Liq. 2 Flammable liquids, Category 3 Skin Corr. 1 Skin corrosion/irritation, Category 1, Sub-Category 1A Skin Corr. 1 Skin corrosion/irritation, Category 1, Sub-Category 1A Skin Corr. 1 Skin corrosion/irritation, Category 1, Sub-Category 1A Skin Corr. 1 Skin corrosion/irritation, Category 1, Sub-Category 1B Skin Irrit. 2 Skin sensitisation, Category 1, Sub-Category 1B Skin Sens. 1 Skin sensitisation, Category 1 Skin Sens. 1 Skin Sens. 1 Skin sensitisation, Category 1 Skin Sens. 1 Skin Sens. 1 Skin sensitisation, Category 1 Skin Sens. 1 Skin Sens. 1 Skin sensitisation, Category 1 Skin Sens. 1 Skin S	Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Aquatic Acute 1 Hazardous to the aquatic environment – Acute Hazard, Category 1 Aquatic Chronic 3 Hazardous to the aquatic environment – Chronic Hazard, Category 3 Asp. Tox. 1 Aspiration hazard, Category 1 Eye Dam. 1 Serious eye damage/eye irritation, Category 2 Flam. Liq. 2 Serious eye damage/eye irritation, Category 2 Flam. Liq. 3 Flammable liquids, Category 3 Skin Corr. 1 Skin corrosion/irritation, Category 1 Skin Corr. 1 Skin corrosion/irritation, Category 1, Sub-Category 1A Skin Corr. 1A Skin corrosion/irritation, Category 1, Sub-Category 1B Skin Irrit. 2 Skin corrosion/irritation, Category 2 Skin Sens. 1 Skin sensitisation, Category 1 Skin Sens. 1 Skin sensitisation, Category 1A Skin Sens. 1 Skin sensitisation, category 1A Skin Sens. 1B Skin sensitisation, category 1B STOT SE 3 Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation H225 Highly flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H315 Causes sevire skin burns and eye damage. H316 Causes sevire skin burns and eye damage. H317 May cause an allergic skin reaction. H318 Causes serious eye larritation.	Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Aquatic Chronic 3 Hazardous to the aquatic environment – Chronic Hazard, Category 3 Asp. Tox. 1 Aspiration hazard, Category 1 Eye Dam. 1 Serious eye damage/eye irritation, Category 2 Flam. Liq. 2 Serious eye damage/eye irritation, Category 2 Flam. Liq. 3 Flammable liquids, Category 3 Skin Corr. 1 Skin corrosion/irritation, Category 1 Skin Corr. 1 Skin corrosion/irritation, Category 1 Skin Corr. 1A Skin corrosion/irritation, Category 1, Sub-Category 1A Skin Corr. 1B Skin corrosion/irritation, Category 1, Sub-Category 1B Skin Irrit. 2 Skin corrosion/irritation, Category 1 Skin Sens. 1 Skin sensitisation, Category 1 Skin Sens. 1 Skin sensitisation, Category 1A Skin Sens. 1B Skin sensitisation, category 1B STOT SE 3 Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H315 Causes severe skin burns and eye damage. H316 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation.	Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Asp. Tox. 1 Aspiration hazard, Category 1  Eye Dam. 1 Serious eye damage/eye irritation, Category 2  Flam. Liq. 2 Flammable liquids, Category 2  Flam. Liq. 3 Flammable liquids, Category 3  Skin Corr. 1 Skin corrosion/irritation, Category 1  Skin Corr. 1 Skin corrosion/irritation, Category 1  Skin Corr. 1A Skin corrosion/irritation, Category 1, Sub-Category 1A  Skin Corr. 1B Skin corrosion/irritation, Category 1, Sub-Category 1B  Skin Irrit. 2 Skin corrosion/irritation, Category 2  Skin Sens. 1 Skin sensitisation, Category 1  Skin Sens. 1 Skin Sens. 1  Skin Sens. 1 Skin sensitisation, category 1  Skin Sens. 1 Skin Sens. 1  Skin Sens. 1  Skin Sens. 1  Skin Sens. 1  Skin Sens. 1  Skin Sens. 1  Skin Sens. 1  Skin Sens	Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Eye Dam. 1 Serious eye damage/eye irritation, Category 1  Eye Irrit. 2 Serious eye damage/eye irritation, Category 2  Flam. Liq. 2 Flammable liquids, Category 2  Flam. Liq. 3 Flammable liquids, Category 3  Skin Corr. 1 Skin corrosion/irritation, Category 1  Skin Corr. 1A Skin corrosion/irritation, Category 1, Sub-Category 1A  Skin Corr. 1B Skin corrosion/irritation, Category 1, Sub-Category 1B  Skin Irrit. 2 Skin corrosion/irritation, Category 2  Skin Sens. 1 Skin sensitisation, Category 1  Skin Sens. 1 Skin sensitisation, category 1A  Skin Sens. 1A Skin sensitisation, category 1B  STOT SE 3 Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation  H225 Highly flammable liquid and vapour.  H226 Flammable liquid and vapour.  H302 Harmful if swallowed.  H304 May be fatal if swallowed and enters airways.  H315 Causes severe skin burns and eye damage.  H316 Causes skin irritation.  H317 May cause an allergic skin reaction.  H318 Causes serious eye damage.  H319 Causes serious eye irritation.	Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Eye Irrit. 2 Serious eye damage/eye Irritation, Category 2 Flam. Liq. 2 Flammable liquids, Category 2 Flam. Liq. 3 Flammable liquids, Category 3 Skin Corr. 1 Skin corrosion/irritation, Category 1 Skin Corr. 1A Skin corrosion/irritation, Category 1, Sub-Category 1A Skin Corr. 1B Skin corrosion/irritation, Category 1, Sub-Category 1B Skin Irrit. 2 Skin corrosion/irritation, Category 2 Skin Sens. 1 Skin sensitisation, Category 1 Skin Sens. 1 Skin sensitisation, category 1A Skin Sens. 1A Skin sensitisation, category 1B STOT SE 3 Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H300 Harmful if swallowed. H301 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation.	Asp. Tox. 1	Aspiration hazard, Category 1
Flam. Liq. 2 Flammable liquids, Category 2 Flam. Liq. 3 Flammable liquids, Category 3 Skin Corr. 1 Skin corrosion/irritation, Category 1 Skin Corr. 1A Skin corrosion/irritation, Category 1, Sub-Category 1A Skin Corr. 1B Skin corrosion/irritation, Category 1, Sub-Category 1B Skin Irrit. 2 Skin corrosion/irritation, Category 2 Skin Sens. 1 Skin sensitisation, Category 1 Skin Sens. 1 Skin sensitisation, Category 1 Skin Sens. 1A Skin sensitisation, category 1B STOT SE 3 Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation H225 Highly flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H315 Causes severe skin burns and eye damage. H316 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation.	Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Flam. Liq. 3  Flammable liquids, Category 3  Skin Corr. 1  Skin Corr. 1A  Skin corrosion/irritation, Category 1, Sub-Category 1A  Skin Corr. 1B  Skin corrosion/irritation, Category 1, Sub-Category 1B  Skin Irrit. 2  Skin corrosion/irritation, Category 2  Skin Sens. 1  Skin sensitisation, Category 1  Skin Sens. 1  Skin sensitisation, category 1  Skin Sens. 1B  Skin sensitisation, category 1B  STOT SE 3  Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation  H225  Highly flammable liquid and vapour.  H302  Harmful if swallowed.  H304  May be fatal if swallowed and enters airways.  H315  Causes severe skin burns and eye damage.  H316  H317  May cause an allergic skin reaction.  H318  Causes serious eye damage.  H319  Causes serious eye irritation.	Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Corr. 1 Skin corrosion/irritation, Category 1 Skin Corr. 1A Skin corrosion/irritation, Category 1, Sub-Category 1A Skin Corr. 1B Skin corrosion/irritation, Category 1, Sub-Category 1B Skin Irrit. 2 Skin corrosion/irritation, Category 2 Skin Sens. 1 Skin sensitisation, Category 1 Skin Sens. 1 Skin sensitisation, category 1A Skin Sens. 1A Skin sensitisation, category 1A Skin Sens. 1B Skin sensitisation, category 1B STOT SE 3 Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H315 Causes severe skin burns and eye damage. H316 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation.	Flam. Liq. 2	Flammable liquids, Category 2
Skin Corr. 1A Skin corrosion/irritation, Category 1, Sub-Category 1B Skin Corr. 1B Skin corrosion/irritation, Category 2, Sub-Category 1B Skin Irrit. 2 Skin corrosion/irritation, Category 2 Skin Sens. 1 Skin sensitisation, Category 1 Skin Sens. 1 Skin sensitisation, category 1A Skin Sens. 1A Skin sensitisation, category 1B Stort Sens. 1B Skin sensitisation, category 1B Stort Sens. 1B Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H315 Causes severe skin burns and eye damage. H316 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation.	Flam. Liq. 3	Flammable liquids, Category 3
Skin Corr. 1B Skin corrosion/irritation, Category 1, Sub-Category 1B Skin Irrit. 2 Skin corrosion/irritation, Category 2 Skin Sens. 1 Skin sensitisation, Category 1 Skin Sens. 1A Skin sensitisation, category 1A Skin Sens. 1B Skin sensitisation, category 1B STOT SE 3 Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H315 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation.	Skin Corr. 1	Skin corrosion/irritation, Category 1
Skin Irrit. 2 Skin corrosion/irritation, Category 2 Skin Sens. 1 Skin sensitisation, Category 1 Skin Sens. 1A Skin sensitisation, category 1A Skin Sens. 1B Skin sensitisation, category 1B STOT SE 3 Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H315 Causes severe skin burns and eye damage. H316 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation.	Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
Skin Sens. 1 Skin sensitisation, Category 1 Skin Sens. 1A Skin sensitisation, category 1A Skin Sens. 1B Skin sensitisation, category 1B STOT SE 3 Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation.	Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Sens. 1A  Skin sensitisation, category 1B  STOT SE 3  Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation  H225  Highly flammable liquid and vapour.  H226  Flammable liquid and vapour.  H302  Harmful if swallowed.  H304  May be fatal if swallowed and enters airways.  H315  Harmful in contact with skin.  H314  Causes severe skin burns and eye damage.  H315  Causes skin irritation.  H317  May cause an allergic skin reaction.  H318  Causes serious eye damage.  H319  Causes serious eye irritation.	Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1B  Skin sensitisation, category 1B  STOT SE 3  Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation  H225  Highly flammable liquid and vapour.  H302  Harmful if swallowed.  H304  May be fatal if swallowed and enters airways.  H315  H314  Causes severe skin burns and eye damage.  H315  May cause an allergic skin reaction.  H318  Causes serious eye damage.  H319  Causes serious eye irritation.	Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3 Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation  H225 Highly flammable liquid and vapour.  H226 Flammable liquid and vapour.  H302 Harmful if swallowed.  H304 May be fatal if swallowed and enters airways.  H315 Harmful in contact with skin.  H316 Causes severe skin burns and eye damage.  H317 May cause an allergic skin reaction.  H318 Causes serious eye damage.  H319 Causes serious eye irritation.	Skin Sens. 1A	Skin sensitisation, category 1A
H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation.	Skin Sens. 1B	Skin sensitisation, category 1B
H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation.	STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation
H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation.	H225	Highly flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.  H312 Harmful in contact with skin.  H314 Causes severe skin burns and eye damage.  H315 Causes skin irritation.  H317 May cause an allergic skin reaction.  H318 Causes serious eye damage.  H319 Causes serious eye irritation.	H226	Flammable liquid and vapour.
H312 Harmful in contact with skin.  H314 Causes severe skin burns and eye damage.  H315 Causes skin irritation.  H317 May cause an allergic skin reaction.  H318 Causes serious eye damage.  H319 Causes serious eye irritation.	H302	Harmful if swallowed.
H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation.	H304	May be fatal if swallowed and enters airways.
H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation.	H312	Harmful in contact with skin.
H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation.	H314	Causes severe skin burns and eye damage.
H318 Causes serious eye damage. H319 Causes serious eye irritation.	H315	Causes skin irritation.
H319 Causes serious eye irritation.	H317	May cause an allergic skin reaction.
	H318	Causes serious eye damage.
H332 Harmful if inhaled.	H319	Causes serious eye irritation.
	H332	Harmful if inhaled.
H335 May cause respiratory irritation.	H335	May cause respiratory irritation.
H336 May cause drowsiness or dizziness.	H336	May cause drowsiness or dizziness.
H400 Very toxic to aquatic life.	H400	Very toxic to aquatic life.
H412 Harmful to aquatic life with long lasting effects.	H412	Harmful to aquatic life with long lasting effects.
EUH066 Repeated exposure may cause skin dryness or cracking.	EUH066	Repeated exposure may cause skin dryness or cracking.

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006

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.