Safety Data Sheet

[Prepared in accordance with Regulation EC 1907/2006 (REACH), as amended]

Date of issue: 03.02.2023
Date of update: —
Version: 1.0/EN

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

1.1. Product identifier

Trade name:	**LUXURY – STRAWBERRY**
UFI:	22T2-50KX-E00Y-K6KU

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

Relevant identified uses:	air freshener.
Uses advised against:	not determined.

1.3. Details of the supplier of the safety data sheet

Manufacturer:	**Dr. MARCUS International Sp. z o.o. Sp. k.**
Address:	Aleja Wojska Polskiego 2C, 62-800 Kalisz, PL
Telephone/fax:	+ 48 62 760 07 00 / +48 62 760 07 59

E-mail address for a competent person responsible for SDS: drmarcus@dr-marcus.com

1.4. Emergency telephone number

112 (general emergency telephone number)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Flam. Liq. 3 H226, **Skin Sens. 1** H317, **STOT SE 3** H336, **Aquatic Chronic 3** H412

Flammable liquid and vapour. May cause an allergic skin reaction. May cause drowsiness or dizziness. Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictograms and signal words

Warning

Hazardous components placed on the label

Contains: 1-methoxy-2-propanol; ethyl 2,3-epoxy-3-phenylbutyrate; cis-4-tert-butylcyclohexyl acetate; linalool; 3-methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one; allyl 3-cyclohexylpropionate; d-limonene; 2,4-dimethylcyclohex-3-ene-1-carbaldehyde; cinnamaldehyde; (E)-1-(2,6,6-trimethyl-1-cyclohexen-1-yl)pent-1-en-3-one; eugenol; p-mentha-1,4(8)-diene; (E)-1-(2,6,6-trimethyl-1-cyclohexen-1-yl)-2-buten-1-one; 2-methylundecanal; ethyl-2,6,6-trimethyl cyclohexa-1,3-ene-1-carboxylate.

Hazard statements

H226	Flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

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.
P273	Avoid release to the environment.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.

P501 Dispose of contents/container to properly labelled waste containers according to national law.

Additional information

None.

2.3. Other hazards

Product does not contain components, which meet criteria for PBT or vPvB in accordance with Annex XIII of REACH Regulation.
The product does not contain substances included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 (3) or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 % by weight.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable.

3.2. Mixtures

CAS number: 107-98-2 EC number: 203-539-1 Index number: 603-064-00-3 Registration number: 01-2119457435-35-XXXX	**1-methoxy-2-propanol**[1)] Flam. Liq. 3 H226, STOT SE 3 H336	C < 45 %
CAS number: 34590-94-8 EC number: 252-104-2 Index number: — Registration number: 01-2119450011-60-XXXX	**(2-methoxymethylethoxy)propanol**[1)] The substance is not classified as hazardous.	C < 20 %
CAS number: 77-83-8 EC number: 201-061-8 Index number: — Registration number: 01-2119967770-28-XXXX	**ethyl 2,3-epoxy-3-phenylbutyrate** Skin Sens. 1B H317, Aquatic Chronic 2 H411	C < 4 %
CAS number: 10411-92-4 EC number: 233-881-7 Index number: — Registration number: 01-2119976287-22-XXXX	**cis-4-tert-butylcyclohexyl acetate** Acute Tox. 4 H302, Skin Sens. 1B H317	C < 4 %
CAS number: 78-70-6 EC number: 201-134-4 Index number: 603-235-00-2 Registration number: 01-2119474016-42-XXXX	**linalool** Skin Irrit. 2 H315, Skin Sens. 1B H317, Eye Irrit. 2 H319	C < 2,5 %
CAS number: 140-11-4 EC number: 205-399-7 Index number: — Registration number: 01-2119638272-42-XXXX	**benzyl acetate** Aquatic Chronic 3 H412	C < 2,5 %
CAS number: 127-51-5 EC number: 204-846-3 Index number: — Registration number: —	**3-methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one** Skin Sens. 1B H317, Aquatic Chronic 2 H411	C < 2 %

CAS number: 8000-41-7 EC number: 232-268-1 Index number: — Registration number: —	**terpineol** Skin Irrit. 2 H315, Eye Irrit. 2 H319	C < 2 %
CAS number: 14576-08-0 EC number: 238-620-0 Index number: — Registration number: —	**4-(1-methoxy-1-methylethyl)-1-methylcyclohexene** Skin Irrit. 2 H315, Aquatic Chronic 3 H412	C < 2 %
CAS number: 2705-87-5 EC number: 220-292-5 Index number: — Registration number: 01-2119976355-27-XXXX	**allyl 3-cyclohexylpropionate** Acute Tox. 4 H302, Acute Tox. 4 H312, Skin Sens. 1B H317, Acute Tox. 4 H332, Aquatic Acute 1 H400 (M=1), Aquatic Chronic 1 H410 (M=1)	C < 1 %
CAS number: 5989-27-5 EC number: 227-813-5 Index number: 601-096-00-2 Registration number: —	**d-limonene** Flam. Liq. 3 H226, Asp. Tox. 1 H304, Skin Irrit. 2 H315, Skin Sens. 1B H317, Aquatic Acute 1 H400 (M=1), Aquatic Chronic 3 H412	C < 0,5 %
CAS number: 68039-49-6 EC number: 268-264-1 Index number: — Registration number: 01-2119982384-28-XXXX	**2,4-dimethylcyclohex-3-ene-1-carbaldehyde** Skin Irrit. 2 H315, Skin Sens. 1B H317, Aquatic Chronic 2 H411	C < 0,5 %
CAS number: 104-55-2 EC number: 203-213-9 Index number: — Registration number: 01-2119935242-45-XXXX	**cinnamaldehyde** Acute Tox. 4 H312, Skin Irrit. 2 H315, Skin Sens. 1A H317, Eye Irrit. 2 H319, Aquatic Chronic 3 H412	C < 0,5 %
CAS number: 63429-28-7 EC number: 264-140-6 Index number: — Registration number: —	**(E)-1-(2,6,6-trimethyl-1-cyclohexen-1-yl)pent-1-en-3-one** Skin Irrit. 2 H315, Skin Sens. 1B H317, Aquatic Chronic 2 H411	C < 0,5 %
CAS number: 97-53-0 EC number: 202-589-1 Index number: — Registration number: 01-2119971802-33-XXXX	**eugenol** Skin Sens. 1B H317, Eye Irrit. 2 H319	C < 0,2 %
CAS number: 586-62-9 EC number: 209-578-0 Index number: — Registration number: —	**p-mentha-1,4(8)-diene** Asp. Tox. 1 H304, Skin Sens. 1B H317, Aquatic Acute 1 H400 (M=1), Aquatic Chronic 1 H410 (M=1)	C < 0,2 %
CAS number: 23726-91-2 EC number: 245-842-1 Index number: — Registration number: 01-2120094433-55-XXXX	**(E)-1-(2,6,6-trimethyl-1-cyclohexen-1-yl)-2-buten-1-one** Skin Irrit. 2 H315, Skin Sens. 1B H317, Aquatic Chronic 2 H411	C < 0,2 %
CAS number: 123-92-2 EC number: 204-662-3 Index number: 607-130-00-2 Registration number: —	**isopentyl acetate**[1)] Flam. Liq. 3 H226 EUH066[2)], Note C	C < 0,2 %

CAS number: 110-41-8 EC number: 203-765-0 Index number: — Registration number: 01-2119969443-29-XXXX	**2-methylundecanal** Skin Irrit. 2 H315, Skin Sens. 1B H317, Aquatic Acute 1 H400 (M=1), Aquatic Chronic 1 H410 (M=1)	C < 0,2 %
CAS number: 112-44-7 EC number: 203-972-6 Index number: — Registration number: 01-2119529242-47-XXXX	**undecanal** Skin Irrit. 2 H315, Aquatic Acute 1 H400 (M=1), Aquatic Chronic 1 H410 (M=1)	C < 0,2 %
CAS number: 35044-59-8 EC number: 252-335-9 Index number: — Registration number: 01-2120085935-42-XXXX	**ethyl-2,6,6-trimethyl cyclohexa-1,3-ene-1-carboxylate** Skin Sens. 1B H317, Aquatic Chronic 3 H412	C < 0,2 %
CAS number: 1589-47-5 EC number: 216-455-5 Index number: 603-106-00-0 Registration number: —	**2-methoxypropanol** Flam. Liq. 3 H226, Skin Irrit. 2 H315, Eye Dam. 1 H318, STOT SE 3 H335, Repr. 1B H360D	C < 0,15 %

[1)] Substance with occupational exposure limits established on the European Union level.

[2)] Additional hazard statement.

Full text of each H phrase is given in section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Contact with skin

Consult a doctor if disturbing symptoms appear. Take off contaminated clothing. Wash the exposed parts of the skin thoroughly with water and soap.

Contact with eyes

Consult a ophthalmologist if disturbing symptoms appear. Protect non-irritated eye, remove contact lenses. Rinse contaminated eyes thoroughly with water for 10 - 15 minutes. Avoid powerful water stream – risk of cornea damage.

Ingestion

Consult a doctor, show the packaging or label. Do not induce vomiting. Rinse mouth with water. Never give anything by mouth to an unconscious person.

After inhalation

Remove the victim to fresh air, keep warm and at rest. Consult a doctor if disturbing symptoms appear.

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

Contact with skin

The product may cause redness, burning sensation, allergic reaction, skin dryness.

Contact with eyes

The product may cause burning sensation, tearing.

Ingestion

May cause nausea, abdominal pains.

After inhalation

High concentration of vapours and mists may cause headaches, dizziness.

Effects of exposure

Not known.

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

Physician makes a decision regarding further medical treatment after thoroughly examination of the injured. Symptomatic treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: adapt the extinguishing media to surrounding materials.
Unsuitable extinguishing media: water jet – risk of the propagation of the flame.

5.2. Special hazards arising from the substance or mixture

During the fire may produce harmful gases containing e.g. carbon monoxides, other hazardous unidentified products of thermal decomposition. Do not inhale combustion products, they can be dangerous for human health.

5.3. Advice for firefighters

Flammable liquid and vapour. Vapours are heavier than air, they accumulate in the lower parts of the premises and pose a risk of explosion. Personal protection typical in case of fire. Do not stay in the fire zone without self-contained breathing apparatus and protective clothing resistant to chemicals. Cool down the containers that are endangered by fire with a water spray from a safe distance. Collect used extinguishing media.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Limit the access for the outsiders into the breakdown area, until the suitable cleaning operations are completed. Ensure that only the trained personnel removes the effects of the accident. In case of large spills, isolate the exposed area. Use personal protective equipment. Eliminate all sources of ignition - do not use an open flame, do not smoke, do not use sparking tools, etc.

6.2. Environmental precautions

Do not allow the product to get into the sewage system, surface waters and soil. In case of release of large amounts of the product, it is necessary to take appropriate steps to prevent it from spreading into the environment. Notify relevant emergency services.

6.3. Methods and material for containment and cleaning up

Small leakage: collect the spilled product with incombustible absorbing materials (e.g. sand, earth, universal binding agents, silica etc.) and place it in waste containers. Treat the collected material as waste. Clean and ventilate the contaminated area.
Large leakage: isolate places where liquid accumulates; pump the collected liquid out.

6.4. Reference to other sections

Appropriate conduct with waste product – see section 13. Personal protective equipment – see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handle in accordance with good occupational hygiene and safety practices. Avoid eyes and skin contamination. Before break and after work wash hands carefully. Keep the unused containers tightly closed. Provide general and / or local ventilation in the workplace in order to maintain the concentration of the harmful agent in the air below the established limit values. Avoid vapor formation. Use personal protective equipment. Eliminate sources of ignition - do not use an open flame, do not smoke, do not use sparking tools and clothes made of fabrics susceptible to static electricity.

7.2. Conditions for safe storage, including any incompatibilities

Store in properly labeled, sealed packages in a dry, cool and well-ventilated place. Keep away from incompatible materials (see subsection 10.5). Keep away from, foodstuffs and animal feed . Keep away from sources of fire. Smoking, using open fire and sparking tools is prohibited in the warehouse.

7.3. Specific end use(s)

No information about other uses than those mentioned in subsection 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limit Values

Legal Basis: Commission Directive 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, 2019/1831/EU.

Specification	TWA 8 hour	STEL 15 min	Notation
1-methoxy-2-propanol	375 mg/m³	568 mg/m³	skin
(2-methoxymethylethoxy)propanol	308 mg/m³	—	skin
isopentyl acetate	270 mg/m³	540 mg/m³	—

Skin - means that skin absorption of a substance may be just as important as inhalation exposure.
Legal Basis: EH40/2005 Workplace exposure limits. Fourth Edition 2020.

Recommended control procedures

Procedures for monitoring concentrations of hazardous components in the air and procedures for monitoring air purity in the workplace should be applied - if available and justified at a given position - in accordance with the relevant national or European Standards, taking into account the conditions at the site of exposure and the appropriate measurement methods adapted to the working conditions. The mode, type and frequency of tests and measurements should meet the requirements of the appropriate laws.

DNEL and PNEC

1-methoxy-2-propanol [CAS 107-98-2]			
Exposure route	Exposure scheme	DNEL	
		worker	consumer
inhalation	short-term local	553,5 mg/m³	—
inhalation	long-term systemic	369 mg/m³	43,9 mg/m³
skin	long-term systemic	183 mg/kg bw/day	78 mg/kg bw/day
oral	long-term systemic	—	33 mg/kg bw/day
inhalation	short-term systemic	553,5 mg/m³	—

1-methoxy-2-propanol [CAS 107-98-2]	
PNEC	Value
marine water	1 mg/l
freshwater	10 mg/l
soil	4,59 mg/kg dry weight
freshwater sediment	52,3 mg/kg dry weight
marine water sediment	5,2 mg/kg dry weight
sewage treatment plant	100 mg/l
freshwater (intermittent release)	100 mg/l

(2-methoxymethylethoxy)propanol [CAS 34590-94-8]			
Exposure route	Exposure scheme	DNEL	
		worker	consumer
inhalation	long-term systemic	308 mg/m³	37,2 mg/m³
skin	long-term systemic	283 mg/kg bw/day	121 mg/kg bw/day

(2-methoxymethylethoxy)propanol [CAS 34590-94-8]			
Exposure route	**Exposure scheme**	**DNEL**	
		worker	**consumer**
inhalation	long-term systemic	308 mg/m³	37,2 mg/m³
oral	long-term systemic	—	36 mg/kg bw/day

(2-methoxymethylethoxy)propanol [CAS 34590-94-8]	
PNEC	**Value**
marine water	1,9 mg/l
freshwater	19 mg/l
soil	2,74 mg/kg dry weight
freshwater sediment	70,2 mg/kg dry weight
marine water sediment	7,02 mg/kg dry weight
sewage treatment plant	4168 mg/l
freshwater (intermittent release)	190 mg/l

ethyl 2,3-epoxy-3-phenylbutyrate [CAS 77-83-8]			
Exposure route	**Exposure scheme**	**DNEL**	
		worker	**consumer**
inhalation	short-term systemic	35,26 mg/m³	8,7 mg/m³
inhalation	long-term systemic	17,63 mg/m³	2,17 mg/m³
inhalation	long-term local	44,08 mg/m³	5,43 mg/m³
inhalation	short-term local	88,16 mg/m³	21,74 mg/m³
oral	short-term systemic	—	5 mg/kg bw/day
oral	long-term systemic	—	1,25 mg/kg bw/day
skin	short-term systemic	10 mg/kg bw/day	5 mg/kg bw/day
skin	long-term systemic	5 mg/kg bw/day	1,25 mg/kg bw/day
skin	long-term local	12,5 mg/cm²	3,13 mg/cm²
skin	short-term local	25 mg/cm²	12,5 mg/cm²

ethyl 2,3-epoxy-3-phenylbutyrate [CAS 77-83-8]	
PNEC	**Value**
marine water	8,4 µg/l
freshwater	0,008 mg/l
soil	0,038 mg/kg dry weight
freshwater sediment	0,214 mg/kg dry weight
marine water sediment	0,021 mg/kg dry weight
sewage treatment plant	10 mg/l
secondary poisoning	23,3 mg/kg food
freshwater (intermittent release)	0,084 mg/l

cis-4-tert-butylcyclohexyl acetate [CAS 10411-92-4]	
PNEC	**Value**
marine water	0,12 µg/l
freshwater	1,2 µg/l
soil	0,078 mg/kg dry weight
freshwater sediment	0,393 mg/kg dry weight
marine water sediment	0,039 mg/kg dry weight
secondary poisoning	66,67 mg/kg food
marine water (intermittent release)	1,2 µg/l
freshwater (intermittent release)	12 µg/l

linalool [CAS 78-70-6]			
Exposure route	**Exposure scheme**	**DNEL**	
		worker	**consumer**
inhalation	long-term systemic	24,58 mg/m³	4,33 mg/m³
oral	long-term systemic	—	2,49 mg/kg bw/day
skin	long-term systemic	3,5 mg/kg bw/day	1,25 mg/kg bw/day
skin	long-term local	3 mg/cm²	1,5 mg/cm²
skin	short-term local	3 mg/cm²	1,5 mg/cm²

linalool [CAS 78-70-6]	
PNEC	**Value**
marine water	0,02 mg/l
freshwater	0,2 mg/l
soil	0,327 mg/kg dry weight
freshwater sediment	2,22 mg/kg dry weight
marine water sediment	0,222 mg/kg dry weight
sewage treatment plant	10 mg/l
secondary poisoning	7,8 mg/kg food
freshwater (intermittent release)	2 mg/l

benzyl acetate [CAS 140-11-4]			
Exposure route	**Exposure scheme**	**DNEL**	
		worker	**consumer**
inhalation	long-term systemic	9 mg/m³	2,2 mg/m³
skin	long-term systemic	2,5 mg/kg bw/day	1,3 mg/kg bw/day
oral	long-term systemic	—	1,3 mg/kg bw/day

benzyl acetate [CAS 140-11-4]	
PNEC	**Value**
marine water	0,002 mg/l

benzyl acetate [CAS 140-11-4]	
PNEC	**Value**
freshwater	0,018 mg/l
soil	0,094 mg/kg dry weight
freshwater sediment	0,526 mg/kg dry weight
marine water sediment	0,053 mg/kg dry weight
sewage treatment plant	8,55 mg/l
freshwater (intermittent release)	0,04 mg/l

allyl 3-cyclohexylpropionate [CAS 2705-87-5]			
Exposure route	**Exposure scheme**	**DNEL**	
		worker	**consumer**
inhalation	long-term systemic	15 mg/m³	3,7 mg/m³
skin	long-term systemic	4,3 mg/kg bw/day	2,1 mg/kg bw/day
oral	long-term systemic	—	2,1 mg/kg bw/day

allyl 3-cyclohexylpropionate [CAS 2705-87-5]	
PNEC	**Value**
marine water	0,013 µg/l
freshwater	0,13 µg/l
soil	4,75 µg/kg dry weight
freshwater sediment	24,13 µg/kg dry weight
marine water sediment	2,413 µg/kg dry weight
sewage treatment plant	0,2 mg/l
secondary poisoning	143 mg/kg food
freshwater (intermittent release)	1,3 µg/l

cinnamaldehyde [CAS 104-55-2]			
Exposure route	**Exposure scheme**	**DNEL**	
		worker	**consumer**
inhalation	long-term systemic	6,11 mg/m³	1,09 mg/m³
skin	long-term systemic	1,75 mg/kg bw/day	0,625 mg/kg bw/day
oral	long-term systemic	—	0,625 mg/kg bw/day

cinnamaldehyde [CAS 104-55-2]	
PNEC	**Value**
marine water	0,8 µg/l
freshwater	8 µg/l
soil	15,6 µg/kg dry weight
freshwater sediment	0,101 mg/kg dry weight
marine water sediment	10,1 µg/kg dry weight

cinnamaldehyde [CAS 104-55-2]	
PNEC	**Value**
sewage treatment plant	7,1 mg/l
marine water (intermittent release)	3,21 µg/l
freshwater (intermittent release)	32,1 µg/l

eugenol [CAS 97-53-0]			
Exposure route	**Exposure scheme**	**DNEL**	
		worker	**consumer**
inhalation	long-term systemic	21,2 mg/m³	5,22 mg/m³
skin	long-term systemic	6 mg/kg bw/day	3 mg/kg bw/day
oral	long-term systemic	—	3 mg/kg bw/day

eugenol [CAS 97-53-0]	
PNEC	**Value**
marine water	0,113 µg/l
freshwater	1,13 µg/l
soil	0,015 mg/kg dry weight
freshwater sediment	0,081 mg/kg dry weight
marine water sediment	0,008 mg/kg dry weight
freshwater (intermittent release)	11,3 µg/l

2-methylundecanal [CAS 110-41-8]			
Exposure route	**Exposure scheme**	**DNEL**	
		worker	**consumer**
inhalation	short-term systemic	352,63 mg/m³	86,96 mg/m³
inhalation	long-term systemic	36,89 mg/m³	9,1 mg/m³
inhalation	long-term local	92,21 mg/m³	22,74 mg/m³
inhalation	short-term local	881,58 mg/m³	217,39 mg/m³
oral	short-term systemic	—	25 mg/kg bw/day
oral	long-term systemic	—	5,23 mg/kg bw/day
skin	short-term systemic	100 mg/kg bw/day	50 mg/kg bw/day
skin	long-term systemic	10,46 mg/kg bw/day	5,23 mg/kg bw/day
skin	long-term local	35,7 mg/cm²	17,86 mg/cm²
skin	short-term local	71,43 mg/cm²	35,71 mg/cm²

2-methylundecanal [CAS 110-41-8]	
PNEC	**Value**
marine water	66 ng/l
freshwater	0,66 µg/l
soil	52,6 µg/kg mg/kg dry weight

2-methylundecanal [CAS 110-41-8]	
PNEC	**Value**
freshwater sediment	0,265 mg/kg dry weight
marine water sediment	26,5 µg/kg dry weight
sewage treatment plant	10 mg/l
secondary poisoning	116 mg/kg food
marine water (intermittent release)	0,18 µg/l
freshwater (intermittent release)	1,8 µg/l

undecanal [CAS 112-44-7]			
Exposure route	**Exposure scheme**	**DNEL**	
		worker	**consumer**
inhalation	long-term systemic	23,5 mg/m³	5,8 mg/m³
inhalation	long-term local	10 mg/m³	5 mg/m³
inhalation	short-term local	10 mg/m³	5 mg/m³
oral	long-term systemic	—	1,7 mg/kg bw/day
skin	long-term systemic	3,3 mg/kg bw/day	1,7 mg/kg bw/day

undecanal [CAS 112-44-7]	
PNEC	**Value**
marine water	0,132 µg/l
freshwater	1,32 µg/l
soil	18,61 µg/kg dry weight
freshwater sediment	96,9 µg/kg dry weight
marine water sediment	9,69 µg/kg dry weight
sewage treatment plant	24,7 mg/l
marine water (intermittent release)	0,132 µg/l
freshwater (intermittent release)	1,32 µg/l

8.2. Exposure controls

Industrial hygiene

Use the product in accordance with good occupational hygiene and safety practices. Do not eat, drink and smoke during the work. Before break and after work wash hands carefully. Ensure adequate general and/or local ventilation at the workplace. If during work processes there is a risk of clothing fire on the employee - no more than 20 m in a horizontal line from the stations where these processes are performed, emergency showers (safety showers) for washing the whole body and separate showers (showers) for eye washing should be installed.

Individual protection measures

The necessity to use and the selection of appropriate personal protective equipment should take into account the type of risk posed by the product, working conditions and the way of handling the product. The personal protective equipment used must meet the requirements of Regulation (EU) 2016/425 and the relevant standards. The employer is obliged to provide protection measures appropriate to the activities performed and meeting all quality requirements, including their maintenance and cleaning. Any contaminated or damaged PPE must be replaced immediately.

Hand protection

Use protective gloves resistant to chemicals according to EN 374. In case of a long-term, frequent contact with the product, in the event of a failure, protective gloves with the effectiveness level 2 or higher are recommended. Recommended material for gloves: nitrile rubber, neoprene.
The glove material has to be impermeable and resistant to the product. The choice of material for protective gloves should be made taking into account the breakthrough times, permeation rate and degradation. Moreover, the selection of the appropriate gloves does not only depend on the material, but also on other quality characteristics and varies from manufacturer to manufacturer. The exact breakthrough time has to be obtained from the glove manufacturer and it must be observed.

Body protection

Use skin protection measures adequate to the existing thermal, chemical or mechanical hazards.

Eye protection

If there is a risk of eye contamination, use safety glasses in accordance with the EN 166 standard.

Respiratory protection

In cases where the risk assessment indicates that it is necessary, respiratory protective equipment compliant with the EN136 standard (masks) or EN 140 (half masks, quarter masks) should be used.

Thermal hazards

Not applicable.

Environmental exposure controls

Prevent direct release to drains/ surface waters. Do not contaminate surface waters and drainage ditches with chemicals or used containers. Released product or uncontrolled spills to surface waters should be reported to appropriate authorities in accordance with local and national legislations. Dispose as chemical waste, in accordance with local and national legislation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	yellow
Odour:	characteristic, pleasant
Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	not determined
Flammability:	not applicable
Lower and upper explosion limit:	1,1 % / 14% vol. (CAS 34590-94-8); 1,48 % / 13,7 % vol. (CAS 107-98-2)
Flash point:	35-55 °C
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
pH:	not determined
Kinematic viscosity:	> 20,5 mm²/s (40°C)
Solubility:	not soluble in water
Partition coefficient n-octanol/water (log value):	not applicable
Vapour pressure:	not determined
Density and/or relative density:	not determined
Relative vapour density:	not determined
Particle characteristics:	not applicable

9.2. Other information

No additional tests.

SECTION 10: Stability and reactivity

10.1. Reactivity

Product is reactive. It does not go under hazardous polimeryzation. Product's vapours may form explosive mixtures with air. See also subsection 10.3-10.5.

10.2. Chemical stability

The product is stable under normal conditions of use and storage.

10.3. Possibility of hazardous reactions

The product reacts with base metals, with the release of explosive hydrogen. Possible undesirable reactions with certain plastics.

10.4. Conditions to avoid

Avoid heat sources, open flames, sparking tools and direct sunlight.

10.5. Incompatible materials

Avoid contact with following materials: strong oxidants, alkali metals.

10.6. Hazardous decomposition products

Not known.

SECTION 11: Toxicological information

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

Acute toxicity

1-methoxy-2-propanol [CAS 107-98-2]	
LD_{50} (oral, rat)	3739 mg/kg
LD_{50} (skin, rat)	> 2000 mg/kg

(2-methoxymethylethoxy)propanol [CAS 34590-94-8]	
LD_{50} (oral, rat)	> 5000 mg/kg
LD_{50} (skin, rabbit)	9510 mg/kg

ethyl 2,3-epoxy-3-phenylbutyrate [CAS 77-83-8]	
LD_{50} (oral, rat)	> 5000 mg/kg
LD_{50} (skin, rat)	> 2000 mg/kg

cis-4-tert-butylcyclohexyl acetate [CAS 10411-92-4]	
LD_{50} (oral, rat)	> 300 - < 2000 mg/kg
LD_{50} (skin, rabbit)	> 5 ml/kg

linalool [CAS 78-70-6]	
LC_{50} (inhalation, mouse)	> 20 mg/1h
LD_{50} (oral, rat)	2790 mg/kg
LD_{50} (skin, rat)	5610 mg/kg

benzyl acetate [CAS 140-11-4]	
LD_{50} (oral, rat)	> 2000 mg/kg
LD_{50} (skin, rabbit)	> 5 g/kg

3-methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one [CAS 127-51-5]	
LD_{50} (oral, rat)	> 5000 mg/kg
LD_{50} (skin, rabbit)	> 5000 mg/kg

4-(1-methoxy-1-methylethyl)-1-methylcyclohexene [CAS 14576-08-0]	
LD_{50} (oral, rat)	> 5000 mg/kg

allyl 3-cyclohexylpropionate [CAS 2705-87-5]	
LD_{50} (oral, rat)	585 mg/kg
LD_{50} (skin, rabbit)	1600 mg/kg

d-limonene [CAS 5989-27-5]	
LD_{50} (oral, rat)	> 2000 mg/kg
LD_{50} (skin, rabbit)	> 5000 mg/kg

cinnamaldehyde [CAS 104-55-2]	
LD_{50} (oral, rat)	2220 mg/kg
LD_{50} (skin, rat)	> 2000 mg/kg

(E)-1-(2,6,6-trimethyl-1-cyclohexen-1-yl)pent-1-en-3-one [CAS 63429-28-7]	
LD_{50} (oral, rat)	> 2000 mg/kg

eugenol [CAS 97-53-0]	
LD_{50} (oral, rat)	> 1500 - < 3000 mg/kg

p-mentha-1,4(8)-diene [CAS 586-62-9]	
LD_{50} (oral, rat)	3740 mg/kg
LD_{50} (skin, rabbit)	> 4300 mg/kg

(E)-1-(2,6,6-trimethyl-1-cyclohexen-1-yl)-2-buten-1-one [CAS 23726-91-2]	
LD_{50} (oral, rat)	> 2000 mg/kg

isopentyl acetate [CAS 123-92-2]	
LD_{50} (oral, rabbit)	7410 mg/kg
LD_{50} (skin, rabbit)	> 5000 mg/kg

2-methylundecanal [CAS 110-41-8]	
LD_{50} (oral, rat)	> 50000 mg/kg
LD_{50} (skin, rabbit)	> 10 ml/kg

undecanal [CAS 112-44-7]	
LD_{50} (oral, rat)	> 5000 mg/kg
LD_{50} (skin, rabbit)	> 5000 mg/kg

Acute toxicity

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

Skin corrosion/irritation

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

Serious eye damage/irritation

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

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Germ cell mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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

STOT-single exposure

Product vapours may cause headaches, dizziness and drowsiness.

STOT-repeated exposure

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

Aspiration hazard

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

Information on likely routes of exposure

Exposure route: eye exposure, skin exposure, inhalation, ingestion. For more information on the impact of each possible route of exposure, see subsection 4.2.

Symptoms related to the physical, chemical and toxicological characteristics

See subsection 4.2 of the SDS.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

See subsection 4.2 of the SDS.

11.2. Information on other hazards

Endocrine disrupting properties

The product does not contain substances included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 (3) or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 % by weight.

Other information

No data.

SECTION 12: Ecological information

12.1. Toxicity

1-methoxy-2-propanol [CAS 107-98-2]		
LC_{50} (fish)	> 6812 mg/l / 96 h / *Leuciscus idus*	method: DIN 38412

(2-methoxymethylethoxy)propanol [CAS 34590-94-8]		
LC_{50} (fish)	> 1000 mg/l / 96 h / *Poecilia reticulata*	method: OECD 203 / EU C.1
NOEC (invertebrates)	≥ 0,5 mg/l / 22 days / *Daphnia magna*	method: OECD 211
NOEC (algae)	> 969 mg/l / 72 h / *Raphidocelis subcapitata*	method: OECD 201 / EU C.3 / EPA OTS 797.1050
EC_{10} (microorganisms)	4168 mg/l / 18 h / *Pseudomonas putida*	method: —

ethyl 2,3-epoxy-3-phenylbutyrate [CAS 77-83-8]		
LC_{50} (fish)	4,2 mg/l / 96 h / *Oncorhynchus mykiss*	method: OECD 203 / EU C.1
EC_{50} (invertebrates)	52 mg/l / 48 h / *Daphnia magna*	method: OECD 202
EC_{50} (algae)	36 mg/l / 72 h / *Pseudokirchneriella subcapitata*	method: OECD 201 / EU C.3 / EPA OPPTS 850.5400

linalool [CAS 78-70-6]		
LC_{50} (fish)	27,8 mg/l / 96 h / *Oncorhynchus mykiss*	method: OECD 203
EC_{50} (invertebrates)	59 mg/l / 48 h / *Daphnia magna*	method: OECD 202
EC_{50} (microorganisms)	> 100 mg/l / 3 h / —	method: OECD 209

benzyl acetate [CAS 140-11-4]		
LC_{50} (fish)	4 mg/l / 96 h / *Oryzias latipes*	method: —
NOEC (fish)	0,92 mg/l / 28 days / *Oryzias latipes*	method: —
EC_{50} (invertebrates)	17 mg/l / 48 h / *Daphnia magna*	method: OECD 202 / EU C.2
EC_{50} (algae)	92 mg/l / 72 h / *Desmodesmus subspicatus*	method: OECD 201 / EU C.3
EC_{50} (microorganisms)	855 mg/l / 3 h / —	method: OECD 209

3-methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one [CAS 127-51-5]		
EC_{50} (invertebrates)	4,7 mg/l / 72 h / *Daphnia magna*	method: OECD 202
EC_{50} (algae)	> 20 mg/l / 72 h / *Desmodesmus subspicatus*	method: OECD 201

4-(1-methoxy-1-methylethyl)-1-methylcyclohexene [CAS 14576-08-0]		
EC_{50} (invertebrates)	15 mg/l / 48 h / *Daphnia magna*	method: OECD 202 / EU C.2
EC_{50} (algae)	26 mg/l / 72 h / *Pseudokirchneriella subcapitata*	method: OECD 201 / EU C.3

allyl 3-cyclohexylpropionate [CAS 2705-87-5]		
LC_{50} (fish)	0,13 mg/l / 96 h / *Pimephales promelas*	method: OECD 203 / EPA OPPTS 850.1075
EC_{50} (invertebrates)	3,8 mg/l / 48 h / *Daphnia magna*	method: OECD 202 / EPA OPPTS 850.1010
EC_{50} (algae)	2,1 mg/l / 72 h / *Pseudokirchneriella subcapitata*	method: OECD 201 / EU C.3 / EPA OPPTS 850.5400

d-limonene [CAS 5989-27-5]		
LC_{50} (fish)	0,72 mg/l / 96 h / *Pimephales promelas*	method: OECD 203
NOEC (fish)	0,059 mg/l / 8 days / *Pimephales promelas*	method: OECD 212
EC_{50} (invertebrates)	0,307 mg/l / 48 h / *Daphnia magna*	method: OECD 202 / EU C.2
NOEC (invertebrates)	0,08 mg/l / 21 days / *Daphnia magna*	method: OECD 211
EC_{50} (algae)	0,214 mg/l / 72 h / *Raphidocelis subcapitata*	method: OECD 201 / EU C.3
EC_{50} (microorganisms)	209 mg/l / 3 h / —	method: OECD 209

cinnamaldehyde [CAS 104-55-2]		
LC_{50} (fish)	2,35 mg/l / 96 h / *Danio rerio*	method: EU C.1
EC_{50} (microorganisms)	71 mg/l / 3 h / —	method: ISO 8192

eugenol [CAS 97-53-0]		
LC_{50} (fish)	13 mg/l / 96 h / *Danio rerio*	method: EU C.1 / OECD 203
EC_{50} (invertebrates)	1,05 mg/l / 48 h / *Daphnia magna*	method: OECD 202 / EU C.2
EC_{50} (algae)	24 mg/l / 72 h / *Desmodesmus subspicatus*	method: OECD 201 / EU C.3

p-mentha-1,4(8)-diene [CAS 586-62-9]		
LC_{50} (fish)	0,805 mg/l / 96 h / *Danio rerio*	method: OECD 203
EC_{50} (invertebrates)	0,634 mg/l / 48 h / *Daphnia sp.*	method: OECD 202
ErC_{50} (algae)	0,692 mg/l / 72 h / *Pseudokirchneriella subcapitata*	method: OECD 201
ErC_{10} (algae)	0,273 mg/l / 72 h / *Pseudokirchneriella subcapitata*	method: OECD 201

isopentyl acetate [CAS 123-92-2]		
LC_{50} (fish)	11,1 mg/l / 96 h / *Danio rerio*	method: OECD 203 / EU C.1
EC_{50} (invertebrates)	26,3 mg/l / 48 h / *Daphnia magna*	method: OECD 202 / EU C.2
NOEC (microorganisms)	300 mg/l / 30 min / —	method: OECD 209 / ISO 8192

2-methylundecanal [CAS 110-41-8]		
LC_{50} (fish)	0,35 mg/l / 96 h / *Oncorhynchus mykiss*	method: OECD 203
EC_{50} (invertebrates)	0,21 mg/l / 48 h / *Daphnia magna*	method: OECD 202
NOEC (invertebrates)	33 µg/l / 21 days / *Daphnia magna*	method: OECD 211 / EPA OPPTS 850.1300
EC_{50} (algae)	0,11 mg/l / 72 h / *Pseudokirchneriella subcapitata*	method: OECD 201
NOEC (microorganisms)	100 mg/l / 22 days / —	method: OECD 301 F

undecanal [CAS 112-44-7]		
EC_{50} (invertebrates)	1459 µg/l / 48 h / *Daphnia magna*	method: OECD 202
EC_{50} (algae)	132 µg/l / 72 h / *Raphidocelis subcapitata*	method: OECD 201 / EU C.3
EC_{50} (microorganisms)	85,3 mg/l / 3 h / —	method: OECD 209

Mixture
Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

1-methoxy-2-propanol CAS 107-98-2	Easily biodegradable	96%/28 days	method: OECD 301 E
(2-methoxymethylethoxy)propanol CAS 34590-94-8	Easily biodegradable	76%/28 days	method: OECD 301 F
ethyl 2,3-epoxy-3-phenylbutyrate CAS 77-83-8	Biodegradable	53%/28 days	method: OECD 301 F / EU C.4-D / EPA OPPTS 835.3110
cis-4-tert-butylcyclohexyl acetate CAS 10411-92-4	Easily biodegradable	76%/28 days	method: OECD 301 D / EU C.4-E

linalool CAS 78-70-6	Easily biodegradable	64,2%/28 days	method: OECD 301 D
benzyl acetate CAS 140-11-4	Easily biodegradable	100,9%/28 days	method: OECD 301 B
3-methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one CAS 127-51-5	Biodegradable	42,51%/28 days	method: OECD 301 D
4-(1-methoxy-1-methylethyl)-1-methylcyclohexene CAS 14576-08-0	Easily biodegradable	76%/28 days	method: OECD 301 F / EU C.4-D / EPA OPPTS 835.3110
allyl 3-cyclohexylpropionate CAS 2705-87-5	Easily biodegradable	62%/28 days	method: OECD 301 D
d-limonene CAS 5989-27-5	Easily biodegradable	71,4%/28 days	method: OECD 301 B
cinnamaldehyde CAS 104-55-2	Easily biodegradable	89%/7 days	method: OECD 301 B
(E)-1-(2,6,6-trimethyl-1-cyclohexen-1-yl)pent-1-en-3-one CAS 63429-28-7	Easily biodegradable	77%/28 days	method: OECD 301 D
eugenol CAS 97-53-0	Easily biodegradable	82%/28 days	method: EU C.4-E
p-mentha-1,4(8)-diene CAS 586-62-9	Easily biodegradable	81%/28 days	method: OECD 301 D
(E)-1-(2,6,6-trimethyl-1-cyclohexen-1-yl)-2-buten-1-one CAS 23726-91-2	Non-biodegradable	-4%/28 days	method: OECD 301 C
2-methylundecanal CAS 110-41-8	Easily biodegradable	68%/22 days	method: OECD 301 F
undecanal CAS 112-44-7	Easily biodegradable	65%/29 days	method: OECD 301 B

12.3. Bioaccumulative potential

1-methoxy-2-propanol CAS 107-98-2	log Po/w = < 1	method: OECD 117
	BCF = —	method: —
(2-methoxymethylethoxy)propanol CAS 34590-94-8	log Po/w = 0,004	method: OECD 107
	BCF = —	method: —
ethyl 2,3-epoxy-3-phenylbutyrate CAS 77-83-8	log Po/w = 2,4	method: OECD 117
	BCF = —	method: —
cis-4-tert-butylcyclohexyl acetate CAS 10411-92-4	log Po/w = 4,8	method: OECD 117 / EU A.8
	BCF = —	method: —

linalool CAS 78-70-6	log Po/w = 2,9	method: —
	BCF = —	method: —
benzyl acetate CAS 140-11-4	log Po/w = 1,96	method: —
	BCF = —	method: —
3-methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one CAS 127-51-5	log Po/w = 4,288	method: OECD 117
	BCF = —	method: —
4-(1-methoxy-1-methylethyl)-1-methylcyclohexene CAS 14576-08-0	log Po/w = 4,5	method: OECD 117
	BCF = —	method: —
allyl 3-cyclohexylpropionate CAS 2705-87-5	log Po/w = 4,28	method: OECD 107
	BCF = 307,8	method: QSAR
d-limonene CAS 5989-27-5	log Po/w = 4,38	method: OECD 117
	BCF = —	method: —
cinnamaldehyde CAS 104-55-2	log Po/w = 2,107	method: OECD 117
	BCF = —	method: —
(E)-1-(2,6,6-trimethyl-1-cyclohexen-1-yl)pent-1-en-3-one CAS 63429-28-7	log Po/w = 4,55	method: OECD 123
	BCF = —	method: OECD 123
eugenol CAS 97-53-0	log Po/w = 1,83	method: EU A.8 / OECD 117
	BCF = —	method: —
p-mentha-1,4(8)-diene CAS 586-62-9	log Po/w = 4,33	method: QSAR
	BCF = 639,4	method: QSAR
(E)-1-(2,6,6-trimethyl-1-cyclohexen-1-yl)-2-buten-1-one CAS 23726-91-2	log Po/w = 3,68	method: OECD 117 / EU A.8
	BCF = —	method: —
isopentyl acetate CAS 123-92-2	log Po/w = 2,7	method: OECD 117
	BCF = —	method: —
2-methylundecanal CAS 110-41-8	log Po/w = 4,9	method: OECD 117 / EU Metoda A.8 / EPA OPPTS 830.7570
	BCF = —	method: —

12.4. Mobility in soil

Mobility of components of the mixture in soil depends on the hydrophilic and hydrophobic properties and biotic and abiotic conditions of soil, including its structure, climatic conditions, seasons and soil organisms.

12.5. Results of PBT and vPvB assessment

Product does not contain components, which meet criteria for PBT or vPvB in accordance with Annex XIII of REACH Regulation.

12.6. Endocrine disrupting properties

The product does not contain substances included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 (3) or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 % by weight.

12.7. Other adverse effects

The mixture is not classified as hazardous to the ozone layer. Consider other harmful effects of individual components of the mixture on the environment (eg, global warming potential).

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recommendations for the product

The waste product should be recovered or disposed of in authorized incineration plants or waste disposal / neutralization plants, in accordance with applicable regulations. Do not empty into drains. The waste code should be given in the place of its formation.

Recommendations for used packaging

Reuse / recycle / eliminate empty containers in accordance with the local legislation. Only completely empty containers can be reused.
EU legal acts: directives of the European Parliament and of the Council: 2008/98 / EC as amended and 94/62 / EC as amended.

Recommended waste codes

The waste code should be assigned at the place of its formation.

SECTION 14: Transport information

14.1. UN number or ID number

UN 1993

14.2. UN proper shipping name

ADR
FLAMMABLE LIQUID, N.O.S.
[1-METHOXY-2-PROPANOL]
IMDG
FLAMMABLE LIQUID, N.O.S.
[1-METHOXY-2-PROPANOL]
ICAO/IATA
FLAMMABLE LIQUID, N.O.S.
[1-METHOXY-2-PROPANOL]

14.3. Transport hazard class(es)

3

14.4. Packing group

III

14.5. Environmental hazards

ADR	no
IMDG	no
ICAO/IATA	no

14.6. Special precautions for user

Avoid sources of heat and fire. Use personal protective equipment according to section 8 when handling the product.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

Additional data

ADR	limited quantity LQ	5 L
	transport category	3
	tunnel restriction code	D/E
IMDG	limited quantity LQ	5 L
	EmS code	F-E, S-E
ICAO/IATA	packing instruction (LQ)	Y344
	limited quantity (LQ)	10 L
	packing instruction, passenger	355
	maximum quantity, passenger	60 L
	packing instruction, cargo	366
	maximum quantity, cargo	220 L

SECTION 15: Regulatory information

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

ADR Agreement concerning the International Carriage of Dangerous Goods by Road.
2000/39/EC COMMISSION DIRECTIVE of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.
2006/15/EC COMMISSION DIRECTIVE of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC.
2009/161/EU COMMISSION DIRECTIVE of 17 December 2009 establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC.
2017/164/EU COMMISSION DIRof 31 January 2017 establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU.
2019/1831/EU COMMISSION DIRECTIVE of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC.
2016/425/EU REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC.
1907/2006/EC REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (as amended).
2020/878/EU COMMISSION REGULATION of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals..
1272/2008/EC REGULATION 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 (as amended).
2008/98/EC DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 November 2008 on waste and repealing certain Directives (as amended).
European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste as amended

15.2. Chemical safety assessment

A Chemical Safety Assessment is not required for mixtures.

SECTION 16: Other information

Full text of H phrases mentioned in section 3

EUH066	Repeated exposure may cause skin dryness or cracking.

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H360D	May damage the unborn child.
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.
Note C	Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers.

Clarification of abbreviations and acronyms

ADR	Agreement concerning the International Carriage of Dangerous Goods by Road.
DIN	German Institute for Standardization
DNEL	Derived No-Effect Level.
EC_{10}	A statistically calculated concentration of a chemical substance in an environmental medium that can cause specific effects in 10% of the tested organisms of a given population under certain conditions.
EC_{50}	(median effective concentration) - statistically calculated concentration of a chemical substance in an environmental medium that can cause specific effects in 50% of the tested organisms of a given population under certain conditions.
EN	European standard
IATA	The International Air Transport Association.
IMDG	International Maritime Dangerous Goods Code.
ISO	International Organization for Standardization
LC_{50}	Concentration of a substance that is lethal to 50 percent of the organisms in a toxicity test.
LD_{50}	Dose of a substance that is lethal to 50 percent of the organisms in a toxicity test.
NOEC	The highest concentration that does not cause a statistically significant adverse effect in the exposed population, when compared with its appropriate control.
OECD	Organisation for Economic Cooperation and Development
PBT	Persistent, bioaccumulative and toxic substance.
PNEC	Predicted no-effect concentration.
RID	The Regulation concerning the International Carriage of Dangerous Goods by Rail.
UFI	Unique Formula Identifier
vPvB	Very persistent and very bioaccumulative substance.

Acute Tox. 4	Acute toxicity - category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute - category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic - category 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic - category 2
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic - category 3
Asp. Tox. 1	Aspiration hazard - category 1
Eye Dam. 1	Serious eye damage - category 1

Eye Irrit. 2	Eye irritation - category 2
Flam. Liq. 3	Flammable liquid - category 3
Repr. 1B	Reproductive toxicity - category 1B
STOT SE 3	Specific target organ toxicity — single exposure - category 3
Skin Irrit. 2	Skin irritation - category 2
Skin Sens. 1	Skin sensitization - category 1
Skin Sens. 1A	Skin sensitization - category 1A
Skin Sens. 1B	Skin sensitization - category 1B

Trainings

Before commencing working with the product, the user should learn the Health & Safety regulations, regarding handling chemicals, and in particular, undergo a proper workplace training. Personnel related with the transport of hazardous substances in accordance with the ADR agreement should be trained and should obtain proper certification in a range of their obligations (general training, workplace training, safety training).

Key literature references and sources of data

This SDS was prepared on the basis of sheets of the individual components, literature data, online databases (eg. ECHA, TOXNET, COSING) as well as our knowledge and experience, taking into account current legislation.

Procedures used for the mixture classification according with Regulation 1272/2008/EC as amended

Flam. Liq. 3 H226	calculation method
Skin Sens. 1 H317	calculation method
STOT SE 3 H336	calculation method
Aquatic Chronic 3 H412	calculation method

Additional information

Changes:	section: —
SDS issued by:	THETA Consulting Sp. z o.o.

The information above is based on a current available data concerning the product, but also on the experience and knowledge in this field of the producer. They are neither a quality description of the product nor a guarantee of particular features. They are to be treated as aid to safety in transport, storage and usage of the product. That does not free the user from the responsibility of improper usage of the information above and also of improper compliance with the law norms in the field.