

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

1.1. Product identifier

Trade name: **Senso Luxury - Bubble Gum**
UFI: SEW2-W0HE-D008-CHAC

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 Irrit. 2 H315, Skin Sens. 1 H317, Eye Irrit. 2 H319, STOT SE 3 H336, Aquatic Chronic 2 H411

Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause drowsiness or dizziness. Toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictograms and signal words



Hazardous components placed on the label

Contains: 1-methoxy-2-propanol; linalool; linalyl acetate; ethyl 2,3-epoxy-3-phenylbutyrate; pin-2(10)-ene; 6,8-dimethylnon-7-enal; 1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one.

Hazard statements

H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic 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.
P302+P352 IF ON SKIN: Wash with plenty of water and soap.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P501 Dispose of contents/container 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-propanol¹⁾ Flam. Liq. 3 H226, STOT SE 3 H336	C < 40 %
CAS number: 34590-94-8 EC number: 252-104-2 Index number: — Registration number: 01-2119450011-60-XXXX	(2-methoxymethylethoxy)propanol¹⁾ The substance is not classified as hazardous.	C < 40 %
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 < 5,5 %
CAS number: 115-95-7 EC number: 204-116-4 Index number: — Registration number: 01-2119454789-19-XXXX	linalyl acetate Skin Irrit. 2 H315, Skin Sens. 1 H317	C ≤ 4 %
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. 1 H317, Aquatic Chronic 2 H411	C ≤ 4 %
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 ≤ 4 %

CAS number: 104-67-6 EC number: 203-225-4 Index number: — Registration number: 01-2119959333-34-XXXX	undecan-4-olide Aquatic Chronic 3 H412	C ≤ 2 %
CAS number: 50-21-5 EC number: 200-018-0 Index number: — Registration number: 01-2119548400-48-XXXX	lactic acid Skin Corr. 1C H314, Eye Dam. 1 H318	C ≤ 2 %
CAS number: 68901-15-5 EC number: 272-657-3 Index number: — Registration number: 01-2120770514-54-XXXX	allyl (cyclohexyloxy)acetate Acute Tox. 4 H302, Aquatic Acute 1 H400 (M=1), Aquatic Chronic 1 H410 (M=1)	C ≤ 2 %
CAS number: 123-68-2 EC number: 204-642-4 Index number: — Registration number: 01-2119983573-26-XXXX	allyl hexanoate Acute Tox. 3 H301, Acute Tox. 3 H311, Acute Tox. 3 H331, Aquatic Acute 1 H400 (M=1), Aquatic Chronic 3 H412	C ≤ 0,4 %
CAS number: 127-91-3 EC number: 204-872-5 Index number: — Registration number: 01-2119519230-54-XXXX	pin-2(10)-ene Flam. Liq. 3 H226, Asp. Tox. 1 H304, Skin Irrit. 2 H315, Skin Sens. 1B H317, Aquatic Acute 1 H400 (M=1), Aquatic Chronic 1 H410 (M=1)	C ≤ 0,4 %
CAS number: 899810-84-5 EC number: 687-633-1 Index number: — Registration number: —	6,8-dimethylnon-7-enal Skin Sens. 1 H317, Aquatic Acute 1 H400 (M=1)	C ≤ 0,4 %
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 < 0,2 %
CAS number: 57378-68-4 EC number: 260-709-8 Index number: — Registration number: —	1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one Acute Tox. 4 H302, Skin Irrit. 2 H315, Skin Sens. 1A H317, Aquatic Acute 1 H400 (M=1), Aquatic Chronic 1 H410 (M=1)	C ≤ 0,04 %

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

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, irritation, allergic reaction, skin dryness.

Contact with eyes

The product may cause burning sensation, irritation, 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/m ³	568 mg/m ³	skin
(2-methoxymethylethoxy)propanol	308 mg/m ³	—	skin

Skin - means that skin absorption of a substance may be just as important as inhalation exposure.

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/m ³
inhalation	long-term systemic	43,9 mg/m ³	369 mg/m ³
skin	long-term systemic	78 mg/kg bw/day	183 mg/kg bw/day
oral	long-term systemic	—	33 mg/kg bw/day
inhalation	short-term systemic	—	553,5 mg/m ³
1-methoxy-2-propanol [CAS 107-98-2]			
PNEC		Value	

marine water	1 mg/l
freshwater	10 mg/l
soil	4,59 mg/kg soil
freshwater sediment	52,3 mg/kg dry weight
marine water sediment	5,2 mg/kg dry weight
sewage treatment plant	100 mg/l

(2-methoxymethylethoxy)propanol [CAS 34590-94-8]			
Exposure route	Exposure scheme	DNEL	
		worker	consumer
skin	long-term systemic	65 mg/kg bw/day	15 mg/kg bw/day
oral	long-term systemic	—	1,67 mg/kg bw/day
inhalation	long-term systemic	310 mg/m ³	37,2 mg/m ³

(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
intermittent release	190 mg/l

linalool [CAS 78-70-6]			
Exposure route	Exposure scheme	DNEL	
		worker	consumer
inhalation	long-term systemic	24,58 mg/m ³	4,33 mg/m ³
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/cm ²	1,5 mg/cm ²
skin	short-term local	3 mg/cm ²	1,5 mg/cm ²

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

marine water (intermittent release)	2 mg/l
-------------------------------------	--------

linalyl acetate [CAS 115-95-7]			
Exposure route	Exposure scheme	DNEL	
		worker	consumer
inhalation	long-term systemic	2,75 mg/m ³	0,68 mg/m ³
oral	long-term systemic	—	0,2 mg/kg bw/day
skin	long-term systemic	2,5 mg/kg bw/day	1,25 mg/kg bw/day
skin	long-term local	236,2 µg/cm ²	236,2 µg/cm ²
skin	short-term local	236,2 µg/cm ²	236,2 µg/cm ²

linalyl acetate [CAS 115-95-7]	
PNEC	Value
marine water	0,001 mg/l
freshwater	0,011 mg/l
soil	0,115 mg/kg dry weight
freshwater sediment	0,609 mg/kg dry weight
marine water sediment	0,061 mg/kg dry weight
sewage treatment plant	1 mg/l
freshwater (intermittent release)	0,11 mg/l

ethyl 2,3-epoxy-3-phenylbutyrate [CAS 77-83-8]			
Exposure route	Exposure scheme	DNEL	
		worker	consumer
inhalation	long-term systemic	0,61 mg/m ³	2,45 mg/m ³
skin	long-term systemic	0,35 mg/kg bw/day	0,7 mg/kg bw/day
oral	long-term systemic	—	0,35 mg/kg bw/day

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

benzyl acetate [CAS 140-11-4]			
Exposure route	Exposure scheme	DNEL	
		worker	consumer

inhalation	long-term systemic	2,2 mg/m ³	9 mg/m ³
skin	long-term systemic	1,3 mg/kg m.c./d	2,5 mg/kg m.c./d
oral	long-term systemic	—	1,3 mg/kg m.c./d

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

undecan-4-olide [CAS 104-67-6]			
Exposure route	Exposure scheme	DNEL	
		worker	consumer
inhalation	long-term systemic	4,68 mg/m ³	19 mg/m ³
skin	long-term systemic	2,7 mg/kg bw/day	5,38 mg/kg bw/day
oral	long-term systemic	—	2,7 mg/kg bw/day

undecan-4-olide [CAS 104-67-6]	
PNEC	Value
marine water	8,4 µg/l
freshwater	84 µg/l
soil	1,019 mg/kg dry weight
freshwater sediment	5,341 mg/kg dry weight
marine water sediment	0,534 mg/kg dry weight
sewage treatment plant	80 mg/l
secondary poisoning	66,7 mg/kg food
freshwater (intermittent release)	58,5 µg/l
freshwater (intermittent release)	5,85 µg/l

lactic acid [CAS 50-21-5]			
Exposure route	Exposure scheme	DNEL	
		worker	consumer
inhalation	long-term local	592 mg/m ³	296 mg/m ³
inhalation	short-term local	—	592 mg/m ³

allyl (cyclohexyloxy)acetate [CAS 68901-15-5]			
Exposure route	Exposure scheme	DNEL	
		worker	consumer

inhalation	long-term systemic	0,557 mg/m ³	3,16 mg/m ³
skin	long-term systemic	0,16 mg/kg bw/day	0,448 mg/kg bw/day
oral	long-term systemic	—	0,16 mg/kg bw/day

allyl (cyclohexyloxy)acetate [CAS 68901-15-5]	
PNEC	Value
marine water	0,205 µg/l
freshwater	2,05 µg/l
soil	0,375 mg/kg dry weight
freshwater sediment	38,7 µg/kg dry weight
marine water sediment	3,87 µg/kg dry weight
sewage treatment plant	0,3 mg/l
marine water (intermittent release)	0,205 µg/l
freshwater (intermittent release)	2,05 µg/l

allyl hexanoate [CAS 123-68-2]			
Exposure route	Exposure scheme	DNEL	
		worker	consumer
inhalation	long-term systemic	3,7 mg/m ³	15 mg/m ³
skin	long-term systemic	2,1 mg/kg bw/day	4,3 mg/kg bw/day
oral	long-term systemic	—	2,1 mg/kg bw/day

allyl hexanoate [CAS 123-68-2]	
PNEC	Value
marine water	0,012 µg/l
freshwater	0,117 µg/l
soil	0,825 µg/kg dry weight
freshwater sediment	4,46 µg/kg dry weight
marine water sediment	0,446 µg/kg dry weight
sewage treatment plant	10 mg/l
secondary poisoning	47,56 mg/kg food
freshwater (intermittent release)	1,17 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, butyl rubber.

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

Use safety glasses in accordance with EN 166.

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:	pink
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% obj. (CAS 34590-94-8); 1,48 % / 13,7 % obj. (CAS 107-98-2)
Flash point:	> 30 °C
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
pH:	not determined
Kinematic viscosity:	not determined
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 polymerization. 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]	
LCL ₀ (inhalation, rat)	> 7000 ppm
LD ₅₀ (oral, rat)	4016 mg/kg
LD ₅₀ (skin, rat)	> 2000 mg/kg
(2-methoxymethylethoxy)propanol [CAS 34590-94-8]	
LC ₀ (inhalation, rat)	275 ppm
LD ₅₀ (oral, rat)	>5000 mg/kg
LD ₅₀ (skin, rabbit)	9510 mg/kg
linalool [CAS 78-70-6]	
LD ₅₀ (oral, rat)	2790 mg/kg
LD ₅₀ (skin, rat)	5610 mg/kg
linalyl acetate [CAS 115-95-7]	
LD ₅₀ (oral, rat)	> 9000 mg/kg
LD ₅₀ (skin, rabbit)	> 5000 mg/kg

ethyl 2,3-epoxy-3-phenylbutyrate [CAS 77-83-8]	
LD ₅₀ (oral, rat)	5 000 mg/kg
LD ₅₀ (skin, rat)	2 000 mg/kg
benzyl acetate [CAS 140-11-4]	
TCL ₀ (inhalation, human)	50 ppm
LCL ₀ (inhalation, mouse)	1300 mg/m ³ / 22h
LD ₅₀ (oral, mouse)	830 mg/kg
LD ₅₀ (oral, rabbit)	2200 mg/kg
LD ₅₀ (oral, rat)	2490 mg/kg
LD ₅₀ (skin, rabbit)	5000 mg/kg
LDL ₉₀ (subcutaneously, rabbit)	4000 mg/kg
undecan-4-olide [CAS 104-67-6]	
LD ₅₀ (oral, rat)	18500 mg/kg
LD ₅₀ (skin, rat)	> 2000 mg/kg
lactic acid [CAS 50-21-5]	
LD ₅₀ (oral, rat)	3543 mg/kg
LD ₅₀ (skin, rabbit)	7400 mg/kg
allyl (cyclohexyloxy)acetate [CAS 68901-15-5]	
LD ₅₀ (oral, rat)	620,42 mg/kg
LD ₅₀ (skin, rat)	> 2000 mg/kg
allyl hexanoate [CAS 123-68-2]	
LD ₅₀ (oral, rat)	218 mg/kg
LD ₅₀ (skin, rabbit)	300 mg/kg
pin-2(10)-ene [CAS 127-91-3]	
LD ₅₀ (oral, rat)	4700 mg/kg
2-methoxypropanol [CAS 1589-47-5]	
LC ₅₀ (inhalation, rat)	> 25,8 mg/l/6h
LD ₅₀ (oral, rat)	4016 mg/kg
LD ₅₀ (skin, rabbit)	> 2000 mg/kg
Mixture	
ATE _{mix} (oral)	12 376,24 mg/kg
ATE _{mix} (skin)	75 000,00 mg/kg
ATE _{mix} (inhalation, vapours)	750,00 mg/l
ATE _{mix} (inhalation, mists)	125,00 mg/l
Based on available data, the classification criteria are not met.	

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Germ cell mutagenicity

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

No data.

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

No data.

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)	> 1000 mg/l / — <i>Oncorhynchus mykiss</i>	method: OECD 203
LC ₅₀ (daphnia)	21100- 25900 mg/l / — <i>Daphnia magna</i>	method: ESR-ES-15
LC ₅₀ (algae)	> 1000 mg/l / — <i>Selenastrum capricornutum</i>	method: ET-11-1987-1
(2-methoxymethylethoxy)propanol [CAS 34590-94-8]		

LC ₅₀ (fish)	>1000 mg/l / — <i>Poecilia reticulata</i>	method: EU C.1; OECD 203
LC ₅₀ (daphnia)	1919 mg/l / — <i>Daphnia magna</i>	method: —
NOEC (algae)	969 mg/l / — <i>Selenastrum capricornutum</i>	method: OECD 201; EU C.3

linalool [CAS 78-70-6]

LC ₅₀ (fish)	27,8 mg/l / 96 h <i>Oncorhynchus mykiss</i>	method: OECD 203
EC ₅₀ (invertebrates)	59 mg/l / 48 h <i>Daphnia magna</i>	method: OECD 202
EC ₅₀ (algae)	88,3 mg/l / 96 h <i>Desmodesmus subspicatus</i>	method: DIN 38412 L 9
EC ₅₀ (microorganisms)	> 100 mg/l / 3 h —	method: OECD 209

linalyl acetate [CAS 115-95-7]

LC ₅₀ (fish)	11 mg/l / 96 h <i>Cyprinus carpio</i>	method: OECD 203
EC ₅₀ (invertebrates)	10,8 mg/l / 48 h <i>Daphnia magna</i>	method: OECD 202

ethyl 2,3-epoxy-3-phenylbutyrate [CAS 77-83-8]

LC ₅₀ (fish)	4,2 mg/L / 96h <i>Oncorhynchus mykiss</i>	method: OECD 203
NOEC (fish)	3,2 mg/L / 96h <i>Oncorhynchus mykiss</i>	method: OECD 203
EC ₅₀ (daphnia)	95 mg/L / 24h <i>Daphnia magna</i>	method: OECD 202
EC ₅₀ (daphnia)	52 mg/L / 48h <i>Daphnia magna</i>	method: OECD 202
EC ₅₀ (algae)	36 mg/L / 72h <i>Pseudokirchneriella subcapitata</i>	method: OECD 201
NOEC (algae)	9,3 mg/L / 72h <i>Pseudokirchneriella subcapitata</i>	method: OECD 201
NOEC (algae)	9,3 mg/L / 96h <i>Pseudokirchneriella subcapitata</i>	method: OECD 201
LOEC (algae)	20 mg/L / 96h <i>Pseudokirchneriella subcapitata</i>	method: OECD 201

benzyl acetate [CAS 140-11-4]

LC ₅₀ (fish)	4 mg/l / 96 h <i>Oryzias latipes</i>	method: ASTM E279-80 (1980)
LC ₅₀ (fish)	1,33 mg/l / 28 d <i>Oryzias latipes</i>	method: ASTM E279-80 (1980)

NOEC (fish)	0,92 mg/l / 28 d <i>Oryzias latipes</i>	method: EPA-600/3-91-063
EC ₅₀ (daphnia)	17 mg/l / 48 h <i>Daphnia magna</i>	method: OECD 203; EU C.2
NOEC (daphnia)	10 mg/l / 48 h <i>Daphnia magna</i>	method: OECD 203; EU C.2
EC ₅₀ (algae)	92 mg/l / 72 h <i>Desmodesmus subspicatus</i>	method: OECD 201; EU C.3
NOEC (algae)	52 mg/l / 72 h <i>Desmodesmus subspicatus</i>	method: OECD 201; EU C.3
LOEC (algae)	113 mg/l / 72 h <i>Desmodesmus subspicatus</i>	method: OECD 201; EU C.3
EC ₅₀ (microorganisms)	855 mg/l / 3 h —	method: OECD 209

undecan-4-olide [CAS 104-67-6]

EC ₅₀ (invertebrates)	5,85 mg/l / 48 h <i>Daphnia magna</i>	method: EU C.2
-------------------------------------	--	----------------

allyl (cyclohexyloxy)acetate [CAS 68901-15-5]

LC ₅₀ (fish)	0,205 mg/l / 96 h <i>Danio rerio</i>	method: OECD 203 / EU Metoda C.1
EC ₅₀ (invertebrates)	11,3 mg/l / 48 h <i>Daphnia magna</i>	method: OECD 202 / EU Metoda C.2
NOEC (invertebrates)	3,2 mg/l / 21 days <i>Daphnia magna</i>	method: OECD 220 / EU Metoda C.20
EC ₅₀ (algae)	36,6 mg/L / 72 h <i>Pseudokirchneriella subcapitata</i>	method: OECD 201

allyl hexanoate [CAS 123-68-2]

LC ₅₀ (fish)	0,117 mg/l / 96 h <i>Danio rerio</i>	method: OECD 203
EC ₅₀ (invertebrates)	2 mg/l / 48 h <i>Daphnia magna</i>	method: EU C.2

2-methoxypropanol [CAS 1589-47-5]

LC ₅₀ (fish)	6812 mg/l / 96h <i>Leuciscus idus</i>	method: DIN 38412
LC ₅₀ (fish)	> 1000 mg/l / 96h <i>Oncorhynchus mykiss</i>	method: OECD 301
LC ₅₀ (invertebrates)	21100-25900mg/l / 96h <i>Daphnia magna</i>	method: OECD 202

Mixture

Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

1-methoxy-2-propanol CAS 107-98-2	Biodegradable	95%/28 days	method: OECD 301 E
(2-methoxymethylethoxy)propanol CAS 34590-94-8	Easily biodegradable	76%/28 days	method: —
linalool CAS 78-70-6	Easily biodegradable	64%/28 days	method: OECD 301D
linalyl acetate CAS 115-95-7	Easily biodegradable	70-80%/28 days	method: OECD 301 F
ethyl 2,3-epoxy-3-phenylbutyrate CAS 77-83-8	Biodegradable	56%/ 36 days	method: OECD 301F
benzyl acetate CAS 140-11-4	Biodegradable	100%/28 d	method: OECD 301B
undecan-4-olide CAS 104-67-6	Easily biodegradable	82%/28 days	method: OECD 301 D
allyl (cyclohexyloxy)acetate CAS 68901-15-5	Hardly biodegradable	24%/28 days	method: OECD 301 D/ EU Metoda C.4-E
allyl hexanoate CAS 123-68-2	Biodegradable	70%/28 days	method: OECD 301 F
2-methoxypropanol CAS 1589-47-5	Biodegradable	96%/28 days	method: OECD 301E

12.3. Bioaccumulative potential

1-methoxy-2-propanol CAS 107-98-2	log Po/w=-0,44	—	method: —
(2-methoxymethylethoxy)propanol CAS 34590-94-8	log Po/w=0,0061	—	method: —
linalool CAS 78-70-6	log Po/w=2,9	—	method: —
linalyl acetate CAS 115-95-7	log Po/w=3,9	BCF 174	method: OECD 107
benzyl acetate CAS 140-11-4	log Po/w=1,96	—	method: —
undecan-4-olide CAS 104-67-6	log Po/w=3,6	BCF ≥ 36,2 - ≤ 47,8 l/kg mokrej masy	method: QSAR
lactic acid CAS 50-21-5	log Po/w=-0,62	—	method: —
allyl (cyclohexyloxy)acetate CAS 68901-15-5	log Po/w=2,8	—	method: OECD 117/ EU Metoda A.8

allyl hexanoate CAS 123-68-2	log Po/w=3,191	BCF 59,2 - 102,3 l/kg	method: QSAR
pin-2(10)-ene CAS 127-91-3	log Po/w=4,16	—	method: —
2-methoxypropanol CAS 1589-47-5	log Po/w=0,37	—	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: Waste treatment methods

13.1. Disposal considerations

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



Safety Data Sheet

Date of issue: 01.04.2016
Date of update: 30.11.2021
Version: 3.0/EN

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

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	yes
IMDG	yes
ICAO/IATA	yes

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 DIRECTIVE of 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).

94/62/EC REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 March 2004 on detergents (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

H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic 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.
H331	Toxic 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.

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 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. 3	Acute toxicity - category 3
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 Corr. 1C	Skin corrosion - category 1C
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. This SDS was prepared on the basis of the safety data sheet provided by the manufacturer, literature data, online databases (eg. ECHA, TOXNET, COSING), our knowledge and experience, taking into account the current legislation.

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

Flam. Liq. 3 H226	calculation method
Skin Irrit. 2 H315	calculation method
Skin Sens. 1 H317	calculation method
Eye Irrit. 2 H319	calculation method
STOT SE 3 H336	calculation method
Aquatic Chronic 2 H411	calculation method

Additional information



Safety Data Sheet

Date of issue: 01.04.2016
Date of update: 30.11.2021
Version: 3.0/EN

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

Changes:

SDS issued by:

section: —

THETA Consulting Sp. z o.o.