

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

1.1. Product identifier

Trade name: LUCKY TOP - VANILLA
UFI: 95WE-S011-100F-TF5E

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

Skin Sens. 1 H317, Aquatic Chronic 2 H411

May cause an allergic skin reaction. Toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictograms and signal words



Hazardous components placed on the label

Contains: limonene; ethyl 2,3-epoxy-3-phenylbutyrate; p-methoxybenzyl acetate; piperonal; citral.

Hazard statements

H317 May cause an allergic skin reaction.
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.
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: 138-86-3 EC number: 205-341-0 Index number: 601-029-00-7 Registration number: —	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 Note C	C < 5,5 %
CAS number: 1222-05-5 EC number: 214-946-9 Index number: 603-212-00-7 Registration number: —	galaxolide Aquatic Acute 1 H400 (M=1), Aquatic Chronic 1 H410 (M=1)	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. 1B H317, Aquatic Chronic 2 H411	C < 2 %
CAS number: 121-33-5 EC number: 204-465-2 Index number: — Registration number: 01-2119516040-60-XXXX	vanillin Eye Irrit. 2 H319	C < 1,5 %
CAS number: 142-19-8 EC number: 205-527-1 Index number: — Registration number: 01-2119488961-23-XXXX	allyl heptanoate Acute Tox. 3 H301, Acute Tox. 3 H311, Aquatic Acute 1 H400 (M=1), Aquatic Chronic 3 H412	C < 0,5 %
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 < 0,5 %
CAS number: 104-21-2 EC number: 203-185-8 Index number: — Registration number: 01-2120752374-54-XXXX	p-methoxybenzyl acetate Skin Sens. 1B H317	C < 0,3 %
CAS number: 120-57-0 EC number: 204-409-7 Index number: — Registration number: 01-2119983608-21-XXXX	piperonal Skin Sens. 1B H317	C < 0,3 %

CAS number: 123-35-3 EC number: 204-622-5 Index number: — Registration number: —	7-methyl-3-methylocta-1,6-diene Flam. Liq. 3 H226, Asp. Tox. 1 H304, Skin Irrit. 2 H315, Eye Irrit. 2 H319, Aquatic Acute 1 H400 (M=1), Aquatic Chronic 2 H411	C < 0,15 %
CAS number: 5392-40-5 EC number: 226-394-6 Index number: 605-019-00-3 Registration number: 01-2119462829-23-XXXX	citral Skin Irrit. 2 H315, Skin Sens. 1B H317, Eye Irrit. 2 H319	C < 0,15 %

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

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

Contact with eyes

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. Consult a ophthalmologist if disturbing symptoms appear.

Ingestion

Due to organoleptic properties, exposure by this route is unlikely. However in case of ingestion rinse mouth with water. Never give anything by mouth to an unconscious person. Consult a doctor if disturbing symptoms occur.

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.

Contact with eyes

The product may cause burning sensation, tearing.

Ingestion

Exposure by this route does not cause negative health effects.

After inhalation

Exposure by this route does not cause negative health effects.

Effects of exposure

There are no known significant effects or critical hazards with the correct use of the product.

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

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.

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

Collect the product mechanically and place it in labelled waste containers and transfer for disposal.

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. Do not eat, drink and smoke during the work. Before break and after work wash hands carefully. Use personal protective equipment. Avoid eyes and skin contamination. Keep the unused containers tightly closed.

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 .

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.

The product does not contain components subject to exposure controls in the workplace.

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

ethyl 2,3-epoxy-3-phenylbutyrate [CAS 77-83-8]			
Exposure route	Exposure scheme	DNEL	
		worker	consumer
inhalation	short-term systemic	35,26 mg/m ³	8,7 mg/m ³
inhalation	long-term systemic	17,63 mg/m ³	2,17 mg/m ³
inhalation	long-term local	44,08 mg/m ³	5,43 mg/m ³
inhalation	short-term local	88,16 mg/m ³	21,74 mg/m ³
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/cm ²	3,13 mg/cm ²
skin	short-term local	25 mg/cm ²	12,5 mg/cm ²

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

vanillin [CAS 121-33-5]	
PNEC	Value
marine water	0,012 mg/l
freshwater	0,118 mg/l
soil	11,54 mg/kg dry weight
freshwater sediment	58,22 mg/kg dry weight
marine water sediment	5,822 mg/kg dry weight
sewage treatment plant	10 mg/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.

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

In case of a prolonged or repeated contact with the product, use protective gloves (EN 374) if a risk assessment indicates this is necessary. Select the material for the gloves individually at the workplace.

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

Not required.

Respiratory protection

Not required with adequate ventilation.

Thermal hazards

Not applicable.

Environmental exposure controls

Avoid release to the environment, do not empty into sewers.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	solid
Colour:	yellow
Odour:	characteristic, pleasant
Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	not determined
Flammability:	not determined
Lower and upper explosion limit:	not applicable
Flash point:	not applicable
Auto-ignition temperature:	not applicable
Decomposition temperature:	not applicable
pH:	not determined
Kinematic viscosity:	not applicable
Solubility:	not soluble in water
Partition coefficient n-octanol/water (log value):	not applicable
Vapour pressure:	not applicable
Density and/or relative density:	not determined
Relative vapour density:	not applicable
Particle characteristics:	not determined

9.2. Other information

No additional tests.

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is not very reactive. It does not go under hazardous polymerization. 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

Hazardous reactions are not known.

10.4. Conditions to avoid

Avoid sources of heat and direct sunlight.

10.5. Incompatible materials

Avoid contact with following materials: strong oxidants.

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

galaxolide [CAS 1222-05-5]	
LC ₅₀ (inhalation, rat)	> 5,04 mg/l
LD ₅₀ (oral, rat)	> 2000 mg/kg
LD ₅₀ (skin, rat)	> 2000 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
vanillin [CAS 121-33-5]	
LD ₅₀ (oral, rat)	3300 mg/kg
LD ₅₀ (skin, rat)	> 2000 mg/kg

Acute toxicity

ATEmix (oral) > 2000 mg/kg

ATEmix (skin) > 2000 mg/kg

ATEmix (inhalation, vapours) > 20 mg/l

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

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

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 on other hazards.

SECTION 12: Ecological information

12.1. Toxicity

galaxolide [CAS 1222-05-5]		
LC ₅₀ (fish)	0,95 mg/l / 96 h / <i>Oryzias latipes</i>	method: OECD 203
EC ₅₀ (invertebrates)	0,194 mg/l / 48 h / <i>Daphnia magna</i>	method: OECD 202
NOEC (invertebrates)	0,111 mg/l / 21 days / <i>Daphnia magna</i>	method: OECD 211
EC ₅₀ (algae)	0,723 mg/l / 72 h / <i>Raphidocelis subcapitata</i>	method: OECD 201
NOEC (fish)	0,068 mg/l / 36 days / <i>Pimephales promelas</i>	method: OECD 210
NOEC (microorganisms)	10 mg/l / 5 days / —	method: —
ethyl 2,3-epoxy-3-phenylbutyrate [CAS 77-83-8]		
LC ₅₀ (fish)	4,2 mg/l / 96 h / <i>Oncorhynchus mykiss</i>	method: OECD 203 / EU C.1
EC ₅₀ (invertebrates)	52 mg/l / 48 h / <i>Daphnia magna</i>	method: OECD 202
EC ₅₀ (algae)	36 mg/l / 72 h / <i>Pseudokirchneriella subcapitata</i>	method: OECD 201 / EU C.3 / EPA OPPTS 850.5400
vanillin [CAS 121-33-5]		
LC ₅₀ (fish)	57 mg/l / 96 h / <i>Pimephales promelas</i>	method: OECD 203
EC ₅₀ (invertebrates)	36,79 mg/l / 48 h / <i>Daphnia magna</i>	method: OECD 202
NOEC (invertebrates)	5,9 mg/l / 21 days / <i>Daphnia magna</i>	method: —
EC ₅₀ (algae)	120 mg/l / 72 h / <i>Pseudokirchneriella subcapitata</i>	method: OECD 201

Mixture
Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

galaxolide CAS 1222-05-5	Hardly biodegradable	1%/28 days	method: OECD 301 B
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
vanillin CAS 121-33-5	Easily biodegradable	97-100%/14 days	method: OECD 301 C

12.3. Bioaccumulative potential

galaxolide CAS 1222-05-5	log Po/w = 5,3	method: —
	BCF = 1584	method: OECD 305 E
ethyl 2,3-epoxy-3-phenylbutyrate CAS 77-83-8	log Po/w = 2,4	method: OECD 117
	BCF = —	method: —

12.4. Mobility in soil

The product is not mobile 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 code should be given in the place of its formation. 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.

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.



Safety Data Sheet

Date of issue: 24.08.2020
Date of update: 10.08.2022
Version: 3.0/EN

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

SECTION 14: Transport information

14.1. UN number or ID number

UN 3077

14.2. UN proper shipping name

ADR

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
[GALAXOLIDE, ETHYL 2,3-EPOXY-3-PHENYLBUTYRATE]

IMDG

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
[GALAXOLIDE, ETHYL 2,3-EPOXY-3-PHENYLBUTYRATE]

ICAO/IATA

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
[GALAXOLIDE, ETHYL 2,3-EPOXY-3-PHENYLBUTYRATE]

14.3. Transport hazard class(es)

9

14.4. Packing group

III

14.5. Environmental hazards

ADR	yes
IMDG	yes
ICAO/IATA	yes

14.6. Special precautions for user

If any substances have leaked and been spilled in a vehicle or container, it may not be reused until after it has been thoroughly cleaned and, if necessary, disinfected or decontaminated. Any other goods and articles carried in the same vehicle or container shall be examined for possible contamination.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

Additional data

ADR	limited quantity LQ	5 kg
	transport category	3
	tunnel restriction code	(-)
IMDG	limited quantity LQ	5 kg
	EmS code	F-A, S-F
ICAO/IATA	packing instruction (LQ)	Y956
	limited quantity (LQ)	30 kg G
	packing instruction, passenger	956
	maximum quantity, passenger	400 kg
	packing instruction, cargo	956
	maximum quantity, cargo	400 kg

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.
IMDG Code International Maritime Dangerous Goods Code
IATA Dangerous Goods Regulations

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).

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).

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..

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.

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

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.

The components of the mixture are not included in Annex XVII of the REACH Regulation.

The components of the mixture are not included in Annex XIV of the REACH Regulation.

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.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
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 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.
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
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 Irrit. 2	Eye irritation - category 2
Flam. Liq. 3	Flammable liquid - category 3
Skin Irrit. 2	Skin irritation - category 2
Skin Sens. 1	Skin sensitization - category 1
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.

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

Skin Sens. 1 H317	calculation method
Aquatic Chronic 2 H411	calculation method

Additional information

Changes:	section: 1-16
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.