Safety Data Sheet

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

Date of issue: 11.07.2022
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Version: 1.0/EN

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

1.1. Product identifier

Trade name:	**Shock Spray Red fruits**
UFI:	KCK5-U08W-800A-C97P

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 3** H412

May cause an allergic skin reaction. 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: Pentadecan-15-olide; p-methoxybenzyl acetate; (E)-1-(2,6,6-trimethyl-1-cyclohexen-1-yl)-2-buten-1-one; 4-hydroxy-2,5-dimethylfuran-2(3H)-one; neryl acetate.

Hazard statements

H317	May cause an allergic skin reaction.
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.
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: 118-71-8 EC number: 204-271-8 Index number: — Registration number: 01-2120766007-55-XXXX	**3-hydroxy-2-methyl-4-pyrone** Acute Tox. 4 H302	C ≤ 2,5 %
CAS number: 28645-51-4 EC number: 249-120-7 Index number: — Registration number: 01-2120103324-74-XXXX	**oxacycloheptadec-10-en-2-one** Aquatic Acute 1 H400 (M=1), Aquatic Chronic 1 H410 (M=1)	C ≤ 0,5 %
CAS number: 106-02-5 EC number: 203-354-4 Index number: — Registration number: 01-2119987323-31-XXXX	**Pentadecan-15-olide** Skin Sens. 1B H317, Aquatic Chronic 2 H411	C ≤ 0,5 %
CAS number: 104-21-2 EC number: 203-185-8 Index number: — Registration number: 01-2119489989-04-XXXX	**p-methoxybenzyl acetate** Skin Sens. 1B H317	C ≤ 0,5 %
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 ≤ 0,5 %
CAS number: 3658-77-3 EC number: 222-908-8 Index number: — Registration number: 01-2120754473-52-XXXX	**4-hydroxy-2,5-dimethylfuran-2(3H)-one** Acute Tox. 4 H302, Skin Corr. 1B H314, Skin Sens. 1A H317, Eye Dam. 1 H318	C ≤ 0,5 %
CAS number: 141-12-8 EC number: 205-459-2 Index number: — Registration number: 01-2120748334-54-XXXX	**neryl acetate** Skin Sens. 1B H317	C ≤ 0,5 %

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

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

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 vomiting, abdominal pains, diarrhea.

After inhalation

High concentration of vapours and mists may cause headaches, respiratory irritation.

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. 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. In case of large spills, isolate the exposed area. Ensure that only the trained personnel removes the effects of the accident. Use personal protective equipment. Caution: risk of slipping on the released product.

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 damaged packages mechanically. Collect the spilled product with incombustible absorbing materials (e.g. sand, earth, universal binding agents) and place it in labelled containers. Proceed in accordance with applicable regulations. Use non-sparking tools. Ventilate the contaminated area.

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. Provide general and / or local ventilation in the workplace. Avoid eyes and skin contamination. Use personal protective equipment. Avoid vapor formation. 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. Container that is opened should be properly resealed and kept upright to prevent leakage. 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

None.

DNEL and PNEC

3-hydroxy-2-methyl-4-pyrone [CAS 118-71-8]			
Exposure route	**Exposure scheme**	**DNEL**	
		worker	**consumer**
inhalation	long-term systemic	1,16 mg/m³	6,58 mg/m³
skin	long-term systemic	0,667 mg/kg bw/day	1,87 mg/kg bw/day
oral	long-term systemic	—	0,667 mg/kg bw/day

3-hydroxy-2-methyl-4-pyrone [CAS 118-71-8]	
PNEC	**Value**
marine water	0,72 µg/l
freshwater	7,2 µg/l
soil	12,2 µg/kg dry weight
freshwater sediment	81,9 µg/kg dry weight

3-hydroxy-2-methyl-4-pyrone [CAS 118-71-8]	
PNEC	**Value**
marine water sediment	8,19 µg/kg dry weight
sewage treatment plant	6,802 mg/l
freshwater (intermittent release)	72 µg/l

oxacycloheptadec-10-en-2-one [CAS 28645-51-4]			
Exposure route	**Exposure scheme**	**DNEL**	
		worker	**consumer**
inhalation	long-term systemic	2,9 mg/m³	16,4 mg/m³
skin	long-term systemic	1,67 mg/kg bw/day	4,67 mg/kg bw/day
oral	long-term systemic	—	1,67 mg/kg bw/day

oxacycloheptadec-10-en-2-one [CAS 28645-51-4]	
PNEC	**Value**
marine water	19,4 ng/l
freshwater	0,194 µg/l
soil	0,654 µg/kg dry weight
freshwater sediment	3,84 µg/kg dry weight
marine water sediment	0,384 µg/kg dry weight
marine water (intermittent release)	0,194 µg/l
freshwater (intermittent release)	1,94 µg/l

Pentadecan-15-olide [CAS 106-02-5]	
PNEC	**Value**
marine water	0,27 µg/l
freshwater	2,7 µg/l
soil	5,44 mg/kg dry weight
freshwater sediment	21 mg/kg dry weight
marine water sediment	4,2 mg/kg dry weight
sewage treatment plant	10 mg/l

p-methoxybenzyl acetate [CAS 104-21-2]			
Exposure route	**Exposure scheme**	**DNEL**	
		worker	**consumer**
skin	short-term local	—	0,25 mg/kg bw/day
inhalation	long-term systemic	0,37 mg/m³	2,468 mg/m³
skin	long-term systemic	—	0,7 mg/kg bw/day
oral	long-term systemic	—	0,25 mg/kg bw/day

p-methoxybenzyl acetate [CAS 104-21-2]	
PNEC	**Value**
marine water	0,001 mg/l
freshwater	0,013 mg/l
soil	0,028 mg/kg dry weight
freshwater sediment	0,18 mg/kg dry weight
marine water sediment	0,018 mg/kg dry weight
sewage treatment plant	0,2 mg/l
marine water (intermittent release)	0,131 mg/l
freshwater (intermittent release)	0,131 mg/l

neryl acetate [CAS 141-12-8]			
Exposure route	**Exposure scheme**	**DNEL**	
		worker	**consumer**
inhalation	long-term systemic	1,09 mg/m³	7,24 mg/m³
skin	long-term systemic	0,733 mg/kg bw/day	2,05 mg/kg bw/day
oral	long-term systemic	—	0,733 mg/kg bw/day

neryl acetate [CAS 141-12-8]	
PNEC	**Value**
marine water	0,49 µg/l
freshwater	4,9 µg/l
soil	0,088 mg/kg dry weight
freshwater sediment	0,455 mg/kg dry weight
marine water sediment	0,045 mg/kg dry weight
sewage treatment plant	100 mg/l
secondary poisoning	29,3 mg/kg food
freshwater (intermittent release)	49 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.

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

Respiratory protection

Not required with adequate ventilation.

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:	colourless
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:	not determined
Flash point:	not determined
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
pH:	not determined
Kinematic viscosity:	not determined
Solubility:	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

The product is not very reactive. It does not go under hazardous polimeryzation. 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. Keep away from cold.

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

3-hydroxy-2-methyl-4-pyrone [CAS 118-71-8]	
LD_{50} (oral, rat)	1440 mg/kg
LD_{50} (skin, rat)	> 2000 mg/kg

oxacycloheptadec-10-en-2-one [CAS 28645-51-4]	
LD_{50} (oral, rat)	> 2000 mg/kg
LD_{50} (skin, rat)	> 2000 mg/kg

Pentadecan-15-olide [CAS 106-02-5]	
LD_{50} (oral, rat)	> 5000 mg/kg
LD_{50} (skin, rabbit)	> 5000 mg/kg

p-methoxybenzyl acetate [CAS 104-21-2]	
LD_{50} (oral, rat)	≥ 5000 mg/kg
LD_{50} (skin, rat)	> 2000 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

4-hydroxy-2,5-dimethylfuran-2(3H)-one [CAS 3658-77-3]	
LD_{50} (oral, rat)	2320 mg/kg

neryl acetate [CAS 141-12-8]	
LD_{50} (oral, rat)	> 2000 mg/kg
LD_{50} (skin, rabbit)	> 6 ml/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

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

3-hydroxy-2-methyl-4-pyrone [CAS 118-71-8]		
LC_{50} (fish)	> 100 mg/l / 96 h / *Danio rerio*	method: OECD 203 / EPA OPPTS 850.1075 / EU C.1
EC_{50} (microorganisms)	680,2 mg/l / 3 h / —	method: OECD 209 / EU C.11

oxacycloheptadec-10-en-2-one [CAS 28645-51-4]		
EC_{50} (invertebrates)	1,7 mg/l / 48 h / *Daphnia magna*	method: OECD 202
EC_{50} (algae)	29,7 mg/l / 72 h / *Desmodesmus subspicatus*	method: OECD 201

Pentadecan-15-olide [CAS 106-02-5]		
NOEC (invertebrates)	0,068 mg/l / 21 days / *Daphnia magna*	method: OECD 211
EC_{50} (algae)	0,4 mg/l / 72 h / *Desmodesmus subspicatus*	method: EU C.3

p-methoxybenzyl acetate [CAS 104-21-2]		
LC_{50} (fish)	13,1 mg/l / 96 h / *Danio rerio*	method: —
EC_{50} (invertebrates)	31 mg/l / 48 h / *Daphnia magna*	method: —

4-hydroxy-2,5-dimethylfuran-2(3H)-one [CAS 3658-77-3]		
EC_{50} (invertebrates)	6,8 mg/l / 48 h / *Daphnia magna*	method: OECD 202
EC_{50} (algae)	194,03 mg/l / 72 h / *Desmodesmus subspicatus*	method: OECD 201 / EU C.3

neryl acetate [CAS 141-12-8]		
EC_{50} (invertebrates)	9,06 mg/l / 48 h / *Daphnia magna*	method: OECD 202 / EU C.2
EC_{50} (microorganisms)	≥ 1000 mg/l / 3 h / —	method: OECD 209

Mixture
Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

3-hydroxy-2-methyl-4-pyrone CAS 118-71-8	Easily biodegradable	105,6%/28 days	method: OECD 301 B
oxacycloheptadec-10-en-2-one CAS 28645-51-4	Easily biodegradable	94%/28 days	method: —
Pentadecan-15-olide CAS 106-02-5	Easily biodegradable	90%/28 days	method: EU C.4-D / OECD 301 F
p-methoxybenzyl acetate CAS 104-21-2	Easily biodegradable	70%/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

12.3. Bioaccumulative potential

3-hydroxy-2-methyl-4-pyrone CAS 118-71-8	log Po/w = 2,3	method: OECD 117
	BCF = —	method: —
oxacycloheptadec-10-en-2-one CAS 28645-51-4	log Po/w = 6,7	method: —
	BCF = —	method: —
Pentadecan-15-olide CAS 106-02-5	log Po/w = 5,79	method: OECD 123
	BCF = —	method: —
p-methoxybenzyl acetate CAS 104-21-2	log Po/w = 2,160	method: —
	BCF = —	method: —
(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: —
4-hydroxy-2,5-dimethylfuran-2(3H)-one CAS 3658-77-3	log Po/w = -0,133	method: OECD 107
	BCF = —	method: —

neryl acetate CAS 141-12-8	log Po/w = 3,98	method: OECD 117
	BCF = —	method: —

12.4. Mobility in soil

The product dissolves in water and spreads in the aquatic environment. The product is 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 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.

SECTION 14: Transport information

14.1. UN number or ID number

Not applicable, the product is not dangerous during transport.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Not applicable.

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

Additional data

Not applicable.

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 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.
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

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
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.

Clarification of abbreviations and acronyms

ADR	Agreement concerning the International Carriage of Dangerous Goods by Road.
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. 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
Eye Dam. 1	Serious eye damage - category 1
Skin Corr. 1B	Skin corrosion - category 1B
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.

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 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.