

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

### 1.1. Product identifier

Trade name: **Shock Spray Vanilla**  
UFI: EFK5-A0Y9-J00T-1MTR

### 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**  
May cause an allergic skin reaction.

### 2.2. Label elements

Hazard pictograms and signal words



Hazardous components placed on the label

Contains: benzyl salicylate; 3,7-dimethylnona-1,6-dien-3-ol; linalool; limonene; linalyl acetate; piperonal; geraniol; coumarin; nerol; 3-(p-ethylphenyl)-2,2-dimethylpropionaldehyde; neryl acetate; geranyl acetate.

Hazard statements

H317 May cause an allergic skin reaction.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
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: 118-58-1 EC number: 204-262-9 Index number: 607-754-00-5 Registration number: 01-2119969442-31-XXXX	<b>benzyl salicylate</b> Skin Sens. 1B H317, Aquatic Chronic 3 H412	C < 5 %
CAS number: 10339-55-6 EC number: 233-732-6 Index number: — Registration number: 01-2119969272-32-XXXX	<b>3,7-dimethylnona-1,6-dien-3-ol</b> Skin Irrit. 2 H315, Skin Sens. 1B H317, Eye Irrit. 2 H319	C ≤ 2,5 %
CAS number: 78-70-6 EC number: 201-134-4 Index number: 603-235-00-2 Registration number: 01-2119474016-42-XXXX	<b>linalool</b> Skin Irrit. 2 H315, Skin Sens. 1B H317, Eye Irrit. 2 H319	C < 1,5 %
CAS number: 4940-11-8 EC number: 225-582-5 Index number: — Registration number: —	<b>2-ethyl-3-hydroxy-4-pyrone</b> Acute Tox. 4 H302	C < 1,5 %
CAS number: 60-12-8 EC number: 200-456-2 Index number: — Registration number: 01-2119963921-31-XXXX	<b>2-phenylethanol</b> Acute Tox. 4 H302, Eye Irrit. 2 H319	C < 1,5 %
CAS number: 138-86-3 EC number: 205-341-0 Index number: 601-029-00-7 Registration number: —	<b>limonene</b> 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 < 1 %
CAS number: 115-95-7 EC number: 204-116-4 Index number: — Registration number: 01-2119454789-19-XXXX	<b>linalyl acetate</b> Skin Irrit. 2 H315, Skin Sens. 1 H317	C ≤ 0,5 %
CAS number: 120-57-0 EC number: 204-409-7 Index number: — Registration number: 01-2119983608-21-XXXX	<b>piperonal</b> Skin Sens. 1B H317, Repr. 2 H361fd	C ≤ 0,5 %

CAS number: 65405-77-8 EC number: 265-745-8 Index number: — Registration number: 01-2119987320-37-XXXX	<b>(Z)-3-hexenyl salicylate</b> Aquatic Acute 1 H400 (M=1), Aquatic Chronic 2 H411	C ≤ 0,5 %
CAS number: 106-24-1 EC number: 203-377-1 Index number: 603-241-00-5 Registration number: —	<b>geraniol</b> Skin Irrit. 2 H315, Skin Sens. 1 H317, Eye Dam. 1 H318	C < 0,3 %
CAS number: 91-64-5 EC number: 202-086-7 Index number: — Registration number: 01-2119943756-26-XXXX	<b>coumarin</b> Acute Tox. 4 H302, Skin Sens. 1B H317	C < 0,25 %
CAS number: 106-25-2 EC number: 203-378-7 Index number: — Registration number: —	<b>nerol</b> Skin Irrit. 2 H315, Skin Sens. 1B H317, Eye Irrit. 2 H319	C < 0,25 %
CAS number: 67634-15-5 EC number: 266-819-2 Index number: — Registration number: —	<b>3-(p-ethylphenyl)-2,2-dimethylpropionaldehyde</b> Skin Irrit. 2 H315, Skin Sens. 1B H317, Aquatic Acute 1 H400 (M=1), Aquatic Chronic 2 H411	C < 0,25 %
CAS number: 141-12-8 EC number: 205-459-2 Index number: — Registration number: —	<b>neryl acetate</b> Skin Sens. 1B H317	C < 0,25 %
CAS number: 105-87-3 EC number: 203-341-5 Index number: — Registration number: —	<b>geranyl acetate</b> Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 3 H412	C < 0,25 %

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

benzyl salicylate [CAS 118-58-1]			
Exposure route	Exposure scheme	DNEL	
		worker	consumer
inhalation	long-term systemic	1,37 mg/m <sup>3</sup>	7,8 mg/m <sup>3</sup>
skin	long-term systemic	0,79 mg/kg bw/day	2,21 mg/kg bw/day
oral	long-term systemic	—	0,79 mg/kg bw/day

benzyl salicylate [CAS 118-58-1]	
PNEC	Value
marine water	0 mg/l
freshwater	0,001 mg/l
soil	1,41 mg/kg dry weight
freshwater sediment	0,583 mg/kg dry weight
marine water sediment	0,058 mg/kg dry weight
sewage treatment plant	10 mg/l
secondary poisoning	52,7 mg/kg food
freshwater (intermittent release)	0,01 mg/l

3,7-dimethylnona-1,6-dien-3-ol [CAS 10339-55-6]			
Exposure route	Exposure scheme	DNEL	
		worker	consumer
inhalation	short-term systemic	18 mg/m <sup>3</sup>	4,4 mg/m <sup>3</sup>
inhalation	long-term systemic	3 mg/m <sup>3</sup>	0,74 mg/m <sup>3</sup>
oral	short-term systemic	—	1,3 mg/kg bw/day
oral	long-term systemic	—	0,2 mg/kg bw/day
skin	short-term systemic	5,5 mg/kg bw/day	2,7 mg/kg bw/day
skin	long-term systemic	2,7 mg/kg bw/day	1,4 mg/kg bw/day

3,7-dimethylnona-1,6-dien-3-ol [CAS 10339-55-6]			
Exposure route	Exposure scheme	DNEL	
		worker	consumer
inhalation	short-term systemic	18 mg/m <sup>3</sup>	4,4 mg/m <sup>3</sup>
skin	long-term local	1,6 mg/cm <sup>2</sup>	1,6 mg/cm <sup>2</sup>
skin	short-term local	1,6 mg/cm <sup>2</sup>	1,6 mg/cm <sup>2</sup>

3,7-dimethylnona-1,6-dien-3-ol [CAS 10339-55-6]	
PNEC	Value
marine water	0,002 mg/l
freshwater	0,023 mg/l
soil	0,031 mg/kg dry weight
freshwater sediment	0,223 mg/kg dry weight
marine water sediment	0,022 mg/kg dry weight
sewage treatment plant	10 mg/l
secondary poisoning	8,53 food
freshwater (intermittent release)	0,23 mg/l

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

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

2-phenylethanol [CAS 60-12-8]			
Exposure route	Exposure scheme	DNEL	
		worker	consumer
inhalation	long-term systemic	17,7 mg/m <sup>3</sup>	59,9 mg/m <sup>3</sup>
skin	long-term systemic	12,7 mg/kg bw/day	21,2 mg/kg bw/day
oral	long-term systemic	—	5,1 mg/kg bw/day
oral	short-term systemic	—	5,1 mg/kg bw/day

2-phenylethanol [CAS 60-12-8]	
PNEC	Value
marine water	0,021 mg/l
freshwater	0,215 mg/l
soil	0,164 mg/kg dry weight
freshwater sediment	1,454 mg/kg dry weight
marine water sediment	0,145 mg/kg dry weight
sewage treatment plant	10 mg/l
freshwater (intermittent release)	2,15 mg/l

linalyl acetate [CAS 115-95-7]			
Exposure route	Exposure scheme	DNEL	
		worker	consumer
inhalation	long-term systemic	2,75 mg/m <sup>3</sup>	0,68 mg/m <sup>3</sup>
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 <sup>2</sup>	236,2 µg/cm <sup>2</sup>
skin	short-term local	236,2 µg/cm <sup>2</sup>	236,2 µg/cm <sup>2</sup>

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

piperonal [CAS 120-57-0]			
Exposure route	Exposure scheme	DNEL	
		worker	consumer
inhalation	long-term systemic	1,3 mg/m <sup>3</sup>	5,29 mg/m <sup>3</sup>
skin	long-term systemic	0,375 mg/kg bw/day	0,75 mg/kg bw/day
oral	long-term systemic	—	0,375 mg/kg bw/day

piperonal [CAS 120-57-0]	
PNEC	Value
marine water	0,25 µg/l
freshwater	2,5 µg/l
soil	0,84 µg/kg dry weight
freshwater sediment	11,95 µg/kg dry weight
marine water sediment	1,2 µg/kg dry weight
sewage treatment plant	10 mg/l
freshwater (intermittent release)	25 µg/l

(Z)-3-hexenyl salicylate [CAS 65405-77-8]			
Exposure route	Exposure scheme	DNEL	
		worker	consumer
inhalation	long-term systemic	0,39 mg/m <sup>3</sup>	1,59 mg/m <sup>3</sup>
skin	long-term systemic	0,45 mg/kg bw/day	0,9 mg/kg bw/day
oral	long-term systemic	—	0,23 mg/kg bw/day

(Z)-3-hexenyl salicylate [CAS 65405-77-8]	
PNEC	Value
marine water	0,061 µg/l
freshwater	0,61 µg/l
soil	0,022 mg/kg dry weight
freshwater sediment	0,11 mg/kg dry weight
marine water sediment	0,011 mg/kg dry weight
sewage treatment plant	10 mg/l
secondary poisoning	40 mg/kg food
freshwater (intermittent release)	6,1 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 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. 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

<b>benzyl salicylate [CAS 118-58-1]</b>	
LD <sub>50</sub> (oral, rat)	2227 mg/kg
LD <sub>50</sub> (skin, rabbit)	14150 mg/kg
<b>3,7-dimethylnona-1,6-dien-3-ol [CAS 10339-55-6]</b>	
LD <sub>50</sub> (skin, rabbit)	> 5000 mg/kg
<b>linalool [CAS 78-70-6]</b>	
LC <sub>50</sub> (inhalation, mouse)	> 20 mg/1h
LD <sub>50</sub> (oral, rat)	2790 mg/kg
LD <sub>50</sub> (skin, rat)	5610 mg/kg
<b>2-ethyl-3-hydroxy-4-pyrone [CAS 4940-11-8]</b>	
LD <sub>50</sub> (oral, rat)	1220 mg/kg
LD <sub>50</sub> (skin, rabbit)	> 5000 mg/kg
<b>2-phenylethanol [CAS 60-12-8]</b>	
LC <sub>50</sub> (inhalation, rat)	> 4,63 mg/l/4h
LD <sub>50</sub> (oral, rat)	1603,3 mg/kg
LD <sub>50</sub> (skin, rabbit)	2535 mg/kg
<b>linalyl acetate [CAS 115-95-7]</b>	
LD <sub>50</sub> (oral, rat)	> 9000 mg/kg
LD <sub>50</sub> (skin, rabbit)	> 5000 mg/kg

<b>piperonal [CAS 120-57-0]</b>	
LD <sub>50</sub> (oral, rat)	2700 mg/kg
LD <sub>50</sub> (skin, rat)	> 5000 mg/kg
<b>(Z)-3-hexenyl salicylate [CAS 65405-77-8]</b>	
LD <sub>50</sub> (oral, rat)	3339 mg/kg
LD <sub>50</sub> (skin, rabbit)	> 2000 mg/kg
<b>geraniol [CAS 106-24-1]</b>	
LD <sub>50</sub> (oral, rat)	3600 mg/kg
LD <sub>50</sub> (skin, rabbit)	> 5000 mg/kg

#### Acute toxicity

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

#### Skin corrosion/irritation

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

#### Serious eye damage/irritation

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

#### Respiratory or skin sensitisation

May cause an allergic skin reaction.

#### Germ cell mutagenicity

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

#### Carcinogenicity

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

#### Reproductive toxicity

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

#### STOT-single exposure

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

<b>benzyl salicylate [CAS 118-58-1]</b>		
LC <sub>50</sub> (fish)	1,03 mg/l / 96 h / <i>Danio rerio</i>	method: EU C.1
EC <sub>50</sub> (invertebrates)	1,16 mg/l / 48 h / <i>Daphnia magna</i>	method: OECD 202
EC <sub>50</sub> (algae)	0,691 mg/l / 72 h / <i>Raphidocelis subcapitata</i>	method: OECD 201
<b>3,7-dimethylnona-1,6-dien-3-ol [CAS 10339-55-6]</b>		
LC <sub>50</sub> (fish)	24 mg/l / 96 h / <i>Danio rerio</i>	method: OECD 203 / EU C.1
EC <sub>50</sub> (invertebrates)	23 mg/l / 48 h / <i>Daphnia magna</i>	method: OECD 202
EC <sub>50</sub> (algae)	13,3 mg/l / 72 h / <i>Desmodesmus subspicatus</i>	method: OECD 201
<b>linalool [CAS 78-70-6]</b>		
LC <sub>50</sub> (fish)	27,8 mg/l / 96 h / <i>Oncorhynchus mykiss</i>	method: OECD 203
EC <sub>50</sub> (invertebrates)	59 mg/l / 48 h / <i>Daphnia magna</i>	method: OECD 202
EC <sub>50</sub> (microorganisms)	> 100 mg/l / 3 h / —	method: OECD 209
<b>2-ethyl-3-hydroxy-4-pyrone [CAS 4940-11-8]</b>		
LC <sub>50</sub> (fish)	> 85 mg/l / 96 h / <i>Oncorhynchus mykiss</i>	method: OECD 203 / EU C.1
EC <sub>50</sub> (invertebrates)	27 mg/l / 48 h / <i>Daphnia magna</i>	method: OECD 202
EC <sub>50</sub> (algae)	7,2 mg/l / 72 h / <i>Raphidocelis subcapitata</i>	method: OECD 201 / EU C.3
NOEC (microorganisms)	15,5 mg/l / 28 days / —	method: —
<b>2-phenylethanol [CAS 60-12-8]</b>		
LC <sub>50</sub> (fish)	215 - 464 mg/l / 96 h / <i>Leuciscus idus</i>	method: DIN 38412
EC <sub>50</sub> (invertebrates)	287,17 mg/l / 48 h / <i>Daphnia magna</i>	method: EU C.2
EC <sub>50</sub> (algae)	0,49 g/l / 72 h / <i>Desmodesmus subspicatus</i>	method: DIN 38412
EC <sub>50</sub> (microorganisms)	> 100 mg/l / 3 h / —	method: OECD 209
<b>linalyl acetate [CAS 115-95-7]</b>		
LC <sub>50</sub> (fish)	11 mg/l / 96 h / <i>Cyprinus carpio</i>	method: OECD 203
<b>piperonal [CAS 120-57-0]</b>		
LC <sub>50</sub> (fish)	2,5 mg/l / 96 h / <i>Cyprinus carpio</i>	method: OECD 203 / EU C.1 / ISO 7346-1
EC <sub>50</sub> (invertebrates)	52 mg/l / 48 h / <i>Daphnia magna</i>	method: OECD 202 / EU C.2 / ISO 6341
EC <sub>50</sub> (algae)	6,8 mg/l / 72 h / <i>Pseudokirchneriella subcapitata</i>	method: OECD 201 / EU C.3 / ISO 8692
<b>(Z)-3-hexenyl salicylate [CAS 65405-77-8]</b>		
LC <sub>50</sub> (fish)	> 0,65 mg/l / 96 h / <i>Oncorhynchus mykiss</i>	method: OECD 203 / EU C.1
EC <sub>50</sub> (invertebrates)	0,6 mg/l / 48 h / <i>Daphnia magna</i>	method: OECD 202 / EU C.2
EC <sub>50</sub> (algae)	0,28 mg/l / 72 h / <i>Desmodesmus subspicatus</i>	method: OECD 201 / EU C.3

<b>geraniol [CAS 106-24-1]</b>		
LC <sub>50</sub> (fish)	22 mg/l / 96 h / <i>Danio rerio</i>	method: OECD 203
EC <sub>50</sub> (microorganisms)	70 mg/l / 30 min / —	method: OECD 209
<b>Mixture</b>		
The product is not classified as hazardous to the aquatic environment.		

## 12.2. Persistence and degradability

benzyl salicylate CAS 118-58-1	Easily biodegradable	93%/28 days	method: OECD 301 F
3,7-dimethylnona-1,6-dien-3-ol CAS 10339-55-6	Easily biodegradable	91%/28 days	method: OECD 301 F
linalool CAS 78-70-6	Easily biodegradable	64,2%/28 days	method: OECD 301 D
2-ethyl-3-hydroxy-4-pyrone CAS 4940-11-8	Easily biodegradable	104,4%/28 days	method: OECD 301 B
linalyl acetate CAS 115-95-7	Easily biodegradable	70-80%/28 days	method: OECD 301 F
piperonal CAS 120-57-0	Easily biodegradable	82%/28 days	method: OECD 301 F
(Z)-3-hexenyl salicylate CAS 65405-77-8	Easily biodegradable	89%/28 days	method: OECD 301 F
geraniol CAS 106-24-1	Easily biodegradable	90-100%/3 days	method: OECD 301 A

## 12.3. Bioaccumulative potential

benzyl salicylate CAS 118-58-1	log Po/w = 4	method: OECD 117 / EU A.8
	BCF = —	method: —
3,7-dimethylnona-1,6-dien-3-ol CAS 10339-55-6	log Po/w = 3,3	method: OECD 107
	BCF = —	method: —
linalool CAS 78-70-6	log Po/w = 2,9	method: —
	BCF = —	method: —
2-ethyl-3-hydroxy-4-pyrone CAS 4940-11-8	log Po/w = 2,9	method: OECD 117
	BCF = 10,4	method: —
2-phenylethanol CAS 60-12-8	log Po/w = 1,3	method: OECD 117
	BCF = —	method: —
linalyl acetate CAS 115-95-7	log Po/w = 3,9	method: OECD 107
	BCF = —	method: —

piperonal CAS 120-57-0	log Po/w = 1,2	method: OECD 117 / EU A.8
	BCF = —	method: —
(Z)-3-hexenyl salicylate CAS 65405-77-8	log Po/w = 4,8	method: OECD 117 / EU A.8
	BCF = —	method: —
geraniol CAS 106-24-1	log Po/w = 2,6	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 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.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.

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H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H400	Very toxic to aquatic life.
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 <sub>50</sub>	(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 <sub>50</sub>	Concentration of a substance that is lethal to 50 percent of the organisms in a toxicity test.
LD <sub>50</sub>	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 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. 2	Reproductive toxicity - category 2
Skin Irrit. 2	Skin irritation - category 2
Skin Sens. 1	Skin sensitization - category 1
Skin Sens. 1B	Skin sensitization - category 1B





# Safety Data Sheet

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

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## 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

## 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.