

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

### 1.1. Product identifier

Trade name: **Pump spray 75 – Black**  
UFI: 1WH5-70J5-100W-4GAK

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

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

### 1.3. Details of the supplier of the safety data sheet

Manufacturer: **Dr. MARCUS International Sp. z o.o. Sp. k.**  
Address: Aleja Wojska Polskiego 2C, 62-800 Kalisz, PL  
Telephone/fax: + 48 62 760 07 00 / +48 62 760 07 59  
E-mail address for a competent person responsible for SDS: drmarcus@dr-marcus.com

### 1.4. Emergency telephone number

112 (general emergency telephone number)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Flam. Liq. 2 H225, Eye Irrit. 2 H319, Aquatic Chronic 3 H412**  
Highly flammable liquid and vapour. Causes serious eye irritation. Harmful to aquatic life with long lasting effects.

### 2.2. Label elements

Hazard pictograms and signal words



Hazardous components placed on the label

None.

Hazard statements

H225 Highly flammable liquid and vapour.  
H319 Causes serious eye irritation.  
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P273 Avoid release to the environment.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P501 Dispose of contents/container to properly labelled waste containers according to national law.

Additional information

EUH208 Contains  $\alpha$ -hexylcinnamaldehyde; 1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one; Pentadecan-15-olide. May produce an allergic reaction.

## 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: 64-17-5 EC number: 200-578-6 Index number: 603-002-00-5 Registration number: 01-2119457610-43-XXXX	<b>ethanol</b> Flam. Liq. 2 H225, Eye Irrit. 2 H319 <u>Specific concentration limits:</u> Eye Irrit. 2 H319: C ≥ 50%	C ≤ 75 %
CAS number: 75-65-0 EC number: 200-889-7 Index number: 603-005-00-1 Registration number: 01-2119444321-51-XXXX	<b>tert-butyl alcohol</b> Flam. Liq. 2 H225, Eye Irrit. 2 H319, Acute Tox. 4 H332, STOT SE 3 H335	C < 15 %
CAS number: 34590-94-8 EC number: 252-104-2 Index number: — Registration number: 01-2119450011-60-XXXX	<b>(2-methoxymethylethoxy)propanol</b> <sup>1)</sup> The substance is not classified as hazardous.	C ≤ 2,5 %
CAS number: 246538-78-3 EC number: 920-901-0 Index number: — Registration number: —	<b>hydrocarbons, C11-C13, isoalkanes, &lt;2% aromatics</b> Asp. Tox. 1 H304 EUH066 <sup>2)</sup>	C ≤ 1 %
CAS number: 469-61-4 EC number: 207-418-4 Index number: — Registration number: —	<b>alpha-cedrene</b> Asp. Tox. 1 H304, Aquatic Acute 1 H400 (M=1), Aquatic Chronic 1 H410 (M=1)	C ≤ 0,25 %
CAS number: 54464-57-2 EC number: 259-174-3 Index number: — Registration number: —	<b>1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one</b> Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 1 H410 (M=1)	C ≤ 0,25 %
CAS number: 106-02-5 EC number: 203-354-4 Index number: — Registration number: —	<b>Pentadecan-15-olide</b> Skin Sens. 1 H317, Aquatic Chronic 2 H411	C ≤ 0,25 %
CAS number: 101-86-0 EC number: 202-983-3 Index number: — Registration number: —	<b>α-hexylcinnamaldehyde</b> Skin Sens. 1B H317, Aquatic Acute 1 H400 (M=1), Aquatic Chronic 2 H411	C ≤ 0,1 %

<sup>1)</sup> Substance with occupational exposure limits established on the European Union level.

<sup>2)</sup> Additional hazard statement.

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Contact with skin

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

#### Contact with eyes

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

#### Ingestion

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

#### After inhalation

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

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

#### Contact with skin

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

#### Contact with eyes

The product may cause burning sensation, irritation, tearing, conjunctival redness.

#### Ingestion

May cause nausea, vomiting, abdominal pains, risk esophageal and gastric perforation, state of alcohol intoxication.

#### After inhalation

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

#### Effects of exposure

Not known.

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

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

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media: carbon dioxide, water spray, sand, extinguishing foam resistant to alcohols, extinguishing powder.

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

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

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

### 6.2. Environmental precautions

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

### 6.3. Methods and material for containment and cleaning up

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

Large leakage: isolate places where liquid accumulates; pump the collected liquid out.

### 6.4. Reference to other sections

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

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

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

### 7.2. Conditions for safe storage, including any incompatibilities

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

### 7.3. Specific end use(s)

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

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational Exposure Limit Values

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

Specification	TWA 8 hour	STEL 15 min	Notation
(2-methoxymethylethoxy)propanol	308 mg/m <sup>3</sup>	—	skin

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

#### Recommended control procedures

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

## DNEL and PNEC

ethanol [CAS 64-17-5]			
Exposure route	Exposure scheme	DNEL	
		worker	consumer
inhalation	long-term systemic	114 mg/m <sup>3</sup>	950 mg/m <sup>3</sup>
skin	long-term systemic	206 mg/kg bw/day	343 mg/kg bw/day
oral	long-term systemic	—	87 mg/kg bw/day

ethanol [CAS 64-17-5]	
PNEC	Value
marine water	0,79 mg/l
freshwater	0,96 mg/l
soil	0,63 mg/kg dry weight
freshwater sediment	3,6 mg/kg dry weight
marine water sediment	2,9 mg/kg dry weight
sewage treatment plant	580 mg/l
secondary poisoning	0,38 g/kg food
freshwater (intermittent release)	2,75 mg/l

tert-butyl alcohol [CAS 75-65-0]			
Exposure route	Exposure scheme	DNEL	
		worker	consumer
inhalation	long-term systemic	0,5 mg/m <sup>3</sup>	2,7 mg/m <sup>3</sup>
skin	long-term systemic	2,7 mg/kg bw/day	5,5 mg/kg bw/day
oral	long-term systemic	—	0,3 mg/kg bw/day
inhalation	short-term systemic	159,8 mg/m <sup>3</sup>	214 mg/m <sup>3</sup>

tert-butyl alcohol [CAS 75-65-0]	
PNEC	Value
marine water	0,2 mg/l
freshwater	2 mg/l
soil	1 mg/kg dry weight
freshwater sediment	8,04 mg/kg dry weight
marine water sediment	0,804 mg/kg dry weight
sewage treatment plant	690 mg/l
secondary poisoning	88700 g/kg food
freshwater (intermittent release)	9,33 mg/l

(2-methoxymethylethoxy)propanol [CAS 34590-94-8]			
Exposure route	Exposure scheme	DNEL	
		worker	consumer

skin	long-term systemic	65 mg/kg bw/day	15 mg/kg bw/day
oral	long-term systemic	—	1,67 mg/kg bw/day
inhalation	long-term systemic	310 mg/m <sup>3</sup>	37,2 mg/m <sup>3</sup>

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

## 8.2. Exposure controls

### Industrial hygiene

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

### Individual protection measures

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

### Hand protection

Use protective gloves resistant to chemicals according to EN 374. In case of a short exposure, use protective gloves with 2nd or higher level of effectiveness (breakthrough time > 30 min). In case of a long exposure, use protective gloves with 6th level of effectiveness (breakthrough time > 480 min). Recommended material for gloves: nitrile rubber, neoprene. When using protective gloves during work with chemical products, it should be noted that the efficacy levels and corresponding breakthrough times do not indicate actual times of protection at a particular workplace, because the protection can be affected by many factors, e.g. temperature, other substances etc. If there are any signs of degradation, damage or change in appearance (colour, flexibility, shape), it is recommended to replace the gloves with a new pair. Please follow the manufacturer's instructions, not only in terms of gloves' usage, but also in terms of their cleaning, maintenance and storage. It is also important to know how to take off the gloves in order to avoid hands contamination.

### Body protection

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

### Eye protection

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

### Respiratory protection

Not required with adequate ventilation. In cases where the risk assessment indicates that it is necessary, respiratory protective equipment compliant with the EN136 standard (masks) or EN 140 (half masks, quarter masks) should be used.

### Thermal hazards

Not applicable.

## Environmental exposure controls

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

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	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:	3,3 % / 19 % obj. (CAS 64-17-5)
Flash point:	22,5 °C
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

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

### 10.2. Chemical stability

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

### 10.3. Possibility of hazardous reactions

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

### 10.4. Conditions to avoid

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

### 10.5. Incompatible materials

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

### 10.6. Hazardous decomposition products

Not known.

## SECTION 11: Toxicological information

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

#### Acute toxicity

ethanol [CAS 64-17-5]	
LD <sub>50</sub> (oral, rat)	10470 mg/kg
LD <sub>50</sub> (skin, rabbit)	17100 mg/kg

tert-butyl alcohol [CAS 75-65-0]	
LC <sub>50</sub> (inhalation, rat)	> 10000 ppm/4h
LD <sub>50</sub> (oral, rat)	2743 mg/kg
LD <sub>50</sub> (skin, rabbit)	> 2000 mg/kg

(2-methoxymethylethoxy)propanol [CAS 34590-94-8]	
LC <sub>0</sub> (inhalation, rat)	275 ppm
LD <sub>50</sub> (oral, rat)	>5000 mg/kg
LD <sub>50</sub> (skin, rabbit)	9510 mg/kg

hydrocarbons, C11-C13, isoalkanes, <2% aromatics [CAS 246538-78-3]	
LC <sub>50</sub> (inhalation, rat)	> 4951 mg/m <sup>3</sup> /4h

α-hexylcinnamaldehyde [CAS 101-86-0]	
LD <sub>50</sub> (oral, mouse)	2300 mg/kg

Mixture	
ATE <sub>mix</sub> (inhalation, vapours)	73,33 mg/l
ATE <sub>mix</sub> (inhalation, mists)	10,00 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

Causes serious eye irritation.

#### Respiratory or skin sensitisation

Based on available data, the classification criteria are not met. The product may cause allergic skin reactions in particularly sensitive people.

#### 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

No data.

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

No data.

## 11.2. Information on other hazards

### Endocrine disrupting properties

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

### Other information

No data on other hazards.

## SECTION 12: Ecological information

### 12.1. Toxicity

<b>ethanol [CAS 64-17-5]</b>		
LC <sub>50</sub> (fish)	15,3 mg/l / 96 h <i>Pimephales promelas</i>	method: US EPA E03-05
NOEC (fish)	250 mg/l / 120 h <i>Danio rerio</i>	method: OECD 212
NOEC (invertebrates)	2 mg/l / 10 days <i>Ceriodaphnia dubia</i>	method: —
<b>tert-butyl alcohol [CAS 75-65-0]</b>		
LC <sub>50</sub> (fish)	> 961 mg/l / 96 h <i>Pimephales promelas</i>	method: OECD 203
EC <sub>50</sub> (invertebrates)	933 mg/l / 48 h <i>Daphnia magna</i>	method: EU C.2
EC <sub>50</sub> (algae)	> 976 mg/l / 24 h <i>Pseudokirchneriella subcapitata</i>	method: OECD 201
NOEC (invertebrates)	100 mg/l / 21 days <i>Daphnia magna</i>	method: OECD 211
<b>(2-methoxymethylethoxy)propanol [CAS 34590-94-8]</b>		
LC <sub>50</sub> (fish)	>1000 mg/l / — <i>Poecilia reticulata</i>	method: EU C.1; OECD 203
LC <sub>50</sub> (daphnia)	1919 mg/l / — <i>Daphnia magna</i>	method: —
NOEC (algae)	969 mg/l / — <i>Selenastrum capricornutum</i>	method: OECD 201; EU C.3

## Mixture

Harmful to aquatic life with long lasting effects.

### 12.2. Persistence and degradability

ethanol CAS 64-17-5	Easily biodegradable	84%/20 days	method: —
tert-butyl alcohol CAS 75-65-0	Hardly biodegradable	66%/56 days	method: OECD 302D
(2-methoxymethylethoxy)propanol CAS 34590-94-8	Easily biodegradable	76%/28 days	method: —

### 12.3. Bioaccumulative potential

ethanol CAS 64-17-5	log Po/w=-0,35	—	method: OECD 107
tert-butyl alcohol CAS 75-65-0	log Po/w=0,32	—	method: OECD 107
(2-methoxymethylethoxy)propanol CAS 34590-94-8	log Po/w=0,0061	—	method: —
hydrocarbons, C11-C13, isoalkanes, <2% aromatics CAS 246538-78-3	log Po/w=1,99 - 7,22	—	method: —

### 12.4. Mobility in soil

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

### 12.5. Results of PBT and vPvB assessment

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

### 12.6. Endocrine disrupting properties

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

### 12.7. Other adverse effects

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

## SECTION 13: Waste treatment methods

### 13.1. Disposal considerations

#### Recommendations for the product

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

## Recommendations for used packaging

Reuse / recycle / eliminate empty containers in accordance with the local legislation. Only completely empty containers can be reused.

EU legal acts: directives of the European Parliament and of the Council: 2008/98 / EC as amended and 94/62 / EC as amended.

## Recommended waste codes

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

## SECTION 14: Transport information

### 14.1. UN number or ID number

UN 1993

### 14.2. UN proper shipping name

#### ADR

FLAMMABLE LIQUID, N.O.S.  
[ETHANOL]

#### IMDG

FLAMMABLE LIQUID, N.O.S.  
[ETHANOL]

#### ICAO/IATA

FLAMMABLE LIQUID, N.O.S.  
[ETHANOL]

### 14.3. Transport hazard class(es)

3

### 14.4. Packing group

II

### 14.5. Environmental hazards

ADR no

IMDG no

ICAO/IATA no

### 14.6. Special precautions for user

Avoid sources of heat and fire.

Use personal protective equipment according to section 8 when handling the product.

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

#### Additional data

ADR	limited quantity LQ	1 L
	transport category	2
	tunnel restriction code	D/E
IMDG	limited quantity LQ	1 L
	EmS code	F-E, S-E
ICAO/IATA	packing instruction (LQ)	Y341
	limited quantity (LQ)	1 L
	packing instruction, passenger	353
	maximum quantity, passenger	5 L
	packing instruction, cargo	364
	maximum quantity, cargo	60 L

## SECTION 15: Regulatory information

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

ADR Agreement concerning the International Carriage of Dangerous Goods by Road

2000/39/EC COMMISSION DIRECTIVE of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

2006/15/EC COMMISSION DIRECTIVE of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC.

2009/161/EU COMMISSION DIRECTIVE of 17 December 2009 establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC.

2017/164/EU COMMISSION DIRECTIVE of 31 January 2017 establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU.

2019/1831/EU COMMISSION DIRECTIVE of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC.

2016/425/EU REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC.

1907/2006/EC REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (as amended).

2020/878/EU COMMISSION REGULATION of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals.

1272/2008/EC REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (as amended).

2008/98/EC DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 November 2008 on waste and repealing certain Directives (as amended).

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

### 15.2. Chemical safety assessment

A Chemical Safety Assessment is not required for mixtures.

## SECTION 16: Other information

### Full text of H phrases mentioned in section 3

EUH066	Repeated exposure may cause skin dryness or cracking.
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
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 <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 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. 2	Flammable liquid - category 2
STOT SE 3	Specific target organ toxicity — single exposure - category 3
Skin Irrit. 2	Skin irritation - category 2
Skin Sens. 1	Skin sensitization - category 1
Skin Sens. 1B	Skin sensitization - category 1B

## Trainings

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

## Key literature references and sources of data

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

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

Flam. Liq. 2 H225	on basis of test data
Eye Irrit. 2 H319	calculation method
Aquatic Chronic 3 H412	calculation method

## Additional information

Changes:	section: —
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