Revision nr. 3
Dated 08/09/2023
Replaced revision:2 (Dated: 24/05/2016)

Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 2020/878 and to Annex II to UK REACH

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

1.1. Product identifier

Code:	[DWD020] 484000008918 [DWD018] 484000008894
Product name	DeoDish - Dishwasher freshener (Marine Fragrance)
UFI :	U720-30DP-T00T-VRQ7

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

Intended use	Dishwasher freshener (Marine Fragrance)

1.3. Details of the supplier of the safety data sheet

Name	Beko Italy Manufacturing Srl
Full address	Via Varesina, 204
District and Country	20156 Milano – Italy
e-mail address of the competent person responsible for the Safety Data Sheet	sds@dgsasrl.it

1.4. Emergency telephone number

For urgent inquiries refer to	ENGLAND, SCOTLAND (NHS 24) WALES (NHS Direct Wales) - For medical advice contact 111

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878.
Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.
Hazard classification and indication:

Skin sensitization, category 1B	H317	May cause an allergic skin reaction.
Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.
Hazard pictograms:

Signal words:	Warning
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.
P302+P352	IF ON SKIN: Wash with plenty of water / . . .
P333+P313	If skin irritation or rash occurs: Get medical advice / attention.
P501	Dispose of contents / container in accordance with local regulation.
Contains:	Eucalyptol 2,6,10-trimetilundec-9-enal trans-menthone

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.
The product does not contain substances with endocrine disrupting properties in concentration ≥ 0.1%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	**x = Conc. %**	**Classification (EC) 1272/2008 (CLP)**
benzyl acetate		
INDEX -	10 ≤ x < 25	Aquatic Chronic 3 H412

EC 205-399-7
CAS 140-11-4
REACH Reg. 01-2119638272-42

2,6-dimethyloct-7-en-2-ol
INDEX - 5 ≤ x < 8,5 Eye Irrit. 2 H319, Skin Irrit. 2 H315
EC 242-362-4
CAS 18479-58-8

3-methyl-5-phenylpentanol
INDEX - 1 ≤ x < 5 Acute Tox. 4 H302
EC 259-461-3 LD50 Oral: 1850 mg/kg
CAS 55066-48-3

Eucalyptol
INDEX - 1 ≤ x < 5 Flam. Liq. 3 H226, Acute Tox. 4 H302, Acute Tox. 4 H312, Skin Sens. 1B H317, Aquatic Chronic 3 H412
EC 207-431-5 STA Oral: 500 mg/kg, LD50 Dermal: 2000 mg/kg
CAS 470-82-6
REACH Reg. 01-2119967772-24

Hydrocarbons, C11-C13, isoalkanes, <2% aromatics
INDEX - 1 ≤ x < 3,5 Asp. Tox. 1 H304, EUH066
EC 920-901-0
CAS 246538-78-3

Hydrocarbons, C12-C16, isoalkanes, cyclics, <2% aromatics
INDEX - 1 ≤ x < 3,5 Asp. Tox. 1 H304
EC 927-676-8
CAS -
REACH Reg. 01-2119456377-30

2,6,10-trimetilundec-9-enal
INDEX - 0,1 ≤ x < 0,9 Skin Sens. 1B H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1
EC 205-460-8
CAS 141-13-9

trans-menthone
INDEX - 0,1 ≤ x < 0,9 Acute Tox. 4 H302, Skin Irrit. 2 H315, Skin Sens. 1B H317, Aquatic Chronic 3 H412
EC 201-941-1 LD50 Oral: 1950 mg/kg
CAS 89-80-5

Allyl (3-methylbutoxy)acetate
INDEX - 0,1 ≤ x < 0,9 Acute Tox. 1 H330, Acute Tox. 4 H302, Skin Irrit. 2 H315
EC 266-803-5 LD50 Oral: 500 mg/kg, LC50 Inhalation vapours: 0,43 mg/l/4h
CAS 67634-00-8

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.
SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.
INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.
INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT
The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.
UNSUITABLE EXTINGUISHING EQUIPMENT
None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION
Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS
Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

Storage class TRGS 510 (Germany):10

7.3. Specific end use(s)

See Subsection 1.2

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

ESP	España	Límites de exposición profesional para agentes químicos en España 2021
ROU	România	Hotărârea nr. 53/2021 pentru modificarea hotărârii guvernului nr. 1.218/2006, precum și pentru modificarea și completarea hotărârii guvernului nr. 1.093/2006

 # benzyl acetate

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	62	10			
TLV	ROU	50	8	80	13	

Predicted no-effect concentration - PNEC		
Normal value in fresh water	18,4	µg/L
Normal value in marine water	1,84	µg/L
Normal value for fresh water sediment	526	µg/L
Normal value for marine water sediment	52,6	µg/L
Normal value for marine water, intermittent release	40	µg/L
Normal value of STP microorganisms	8,55	mg/l
Normal value for the food chain (secondary poisoning)	NEA	
Normal value for the terrestrial compartment	94,45	mg/kg/d
Normal value for the atmosphere	NPI	

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		NPI		1,3 mg/kg bw/d				
Inhalation	NPI	NPI	NPI	2,2 mg/m3	NPI	NPI	NPI	9 mg/m3
Skin	NPI	NPI	NPI	1,3 mg/kg bw/d	NPI	NPI	NPI	2,5 mg/kg bw/d

 # 2,6-dimethyloct-7-en-2-ol

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,0278	mg/l
Normal value in marine water	0,00278	mg/l
Normal value for fresh water sediment	0,594	mg/kg
Normal value for marine water sediment	0,0594	mg/kg
Normal value of STP microorganisms	10	mg/l
Normal value for the food chain (secondary poisoning)	111	mg/kg
Normal value for the terrestrial compartment	0,103	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic

Oral		NPI		2,5 mg/kg bw/d				
Inhalation	NPI	NPI	NPI	4,35 mg/m3	NPI	NPI	NPI	24,7 mg/m3
Skin	LOW	LOW	NPI	2,5 mg/kg bw/d	LOW	NPI	LOW	7 mg/kg bw/d

 # Eucalyptol

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		NPI		600 mg/kg bw/d				
Inhalation	NPI	NPI	NEA	1,74 mg/m3	NPI	NPI	NPI	7,05 mg/m3
Skin	NPI	1 mg/kg bw/d	MED	NPI	NPI	NPI	MED	2 mg/kg bw/d

 # 3-methyl-5-phenylpentanol

Predicted no-effect concentration - PNEC		
Normal value in fresh water	13	µg/L
Normal value in marine water	1,3	µg/L
Normal value for fresh water sediment	1,034	mg/kg/d
Normal value for marine water sediment	103,35	µg/kg/d
Normal value for marine water, intermittent release	130	µg/L
Normal value of STP microorganisms	10	mg/l
Normal value for the food chain (secondary poisoning)	10	mg/kg
Normal value for the terrestrial compartment	199	µg/kg
Normal value for the atmosphere	NPI	

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		375 µg/kg bw/d		60 µg/kg bw/d				
Inhalation	NPI	1,3 mg/m3	NPI	210 µg/m3	NPI	5,3 mg/m3	NEA	880 µg/m3
Skin	390 µg/cm2	1,5 mg/kg bw/d	65 µg/cm2	250 µg/kg bw/d	NPI	3 mg/kg bw/d	130 µg/cm2	500 µg/kg bw/d

 # Hydrocarbons, C12-C16, isoalkanes, cyclics, <2% aromatics

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		NPI		NPI				
Inhalation	NPI	NPI	NPI	NPI	NPI	NPI	NPI	
Skin	NPI	NPI	NPI	NPI	NPI	NPI	NPI	NPI

 # Hydrocarbons, C11-C13, isoalkanes, <2% aromatics

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		NPI		NPI				
Inhalation	NPI	NPI	NPI	NPI	NPI	NPI	NPI	NPI
Skin	NPI	NPI	NPI	NPI	NPI	NPI	NPI	NPI

 # 2,6,10-trimetilundec-9-enal

Predicted no-effect concentration - PNEC		
Normal value in fresh water	587	ng/L
Normal value in marine water	58,77	µg/L
Normal value for fresh water sediment	427	µg/L
Normal value for marine water sediment	42,7	µg/L
Normal value for marine water, intermittent release	5,877	µg/L
Normal value for fresh water, intermittent release	5,877	µg/L
Normal value of STP microorganisms	10	mg/l
Normal value for the food chain (secondary poisoning)	74	mg/kg
Normal value for the terrestrial compartment	92,6	µg/kg
Normal value for the atmosphere	NPI	

 # Allyl (3-methylbutoxy)acetate

Predicted no-effect concentration - PNEC		
Normal value in fresh water	770	ng/l
Normal value in marine water	77	µg/l
Normal value for fresh water sediment	8,93	µg/l
Normal value for marine water sediment	893	ng/l
Normal value for marine water, intermittent release	7,7	µg/l
Normal value for fresh water, intermittent release	770	ng/l

Normal value of STP microorganisms	NPI	
Normal value for the food chain (secondary poisoning)	VND	
Normal value for the terrestrial compartment	1,33	µg/kg
Normal value for the atmosphere	NPI	

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		NPI		0,5 mg/kg bw/d				
Inhalation	NPI	NPI	NPI	0,87 mg/m3	NPI	NPI	NPI	4,93 mg/m3
Skin	NPI	NPI	NPI	0,5 mg/kg bw/d	NPI	NPI	NPI	1,4 mg/kg bw/d

 # trans-menthone

Predicted no-effect concentration - PNEC		
Normal value in fresh water	12,9	µg/L
Normal value in marine water	1,29	µg/L
Normal value for fresh water sediment	129	µg/L
Normal value for marine water sediment	12,9	µg/L
Normal value for marine water, intermittent release	129	µg/L
Normal value for fresh water, intermittent release	12,9	µg/L
Normal value of STP microorganisms	NPI	
Normal value for the food chain (secondary poisoning)	NEA	
Normal value for the terrestrial compartment	18,2	µg/L
Normal value for the atmosphere	NPI	

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		MED		4 mg/kg bw/d				
Inhalation	LOW	LOW	LOW	5,92 mg/m3	LOW	LOW	LOW	39,5 mg/m3
Skin	LOW	LOW	LOW	4 mg/kg bw/d	LOW	LOW	LOW	11.2 mg/kg bw/d

Legend:
(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.
VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.
When choosing personal protective equipment, ask your chemical substance supplier for advice.
Personal protective equipment must be CE marked, showing that it complies with applicable standards.
Provide an emergency shower with face and eye wash station.

HAND PROTECTION
Protect hands with category III work gloves.
The following should be considered when choosing work glove material (see standard EN 374): compatibility, degradation, failure time and permeability.
The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION
Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION
Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION
If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, wear a mask with a type AX filter, whose limit of use will be defined by the manufacturer (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.
Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.
If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS
The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.
Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	gelatinous liquid	
Colour	Light Blue\parDark Blue	
Odour	characteristic	
Melting point / freezing point	not available	
Initial boiling point	> 35 °C	
Flammability	not available	
Lower explosive limit	not available	
Upper explosive limit	not available	
Flash point	65 °C	
Auto-ignition temperature	not available	
Decomposition temperature	not available	
pH	not available	
Kinematic viscosity	not available	
Solubility	insoluble in water	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	not available	
Density and/or relative density	0,963 - 0,977 g/cm3	
Relative vapour density	not available	
Particle characteristics	not applicable	

9.2. Other information

9.2.1. Information with regard to physical hazard classes
Information not available
9.2.2. Other safety characteristics
Information not available

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

10.4. Conditions to avoid

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

SECTION 11. Toxicological information

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

Metabolism, toxicokinetics, mechanism of action and other information
Information not available

Information on likely routes of exposure
Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure
Information not available

Interactive effects
Information not available

ACUTE TOXICITY

ATE (Inhalation - vapours) of the mixture:	> 20 mg/l
ATE (Oral) of the mixture:	>2000 mg/kg
ATE (Dermal) of the mixture:	>2000 mg/kg
# benzyl acetate	
LD50 (Dermal):	5000 mg/kg
LD50 (Oral):	2000 mg/kg
LC50 (Inhalation vapours):	0,766 mg/l/4h
# 2,6-dimethyloct-7-en-2-ol	
LD50 (Dermal):	> 5000 mg/kg
LD50 (Oral):	> 3020 mg/kg

Eucalyptol

LD50 (Dermal):	2000 mg/kg
LD50 (Oral):	4500 mg/kg
STA (Oral):	500 mg/kg estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

3-methyl-5-phenylpentanol

LD50 (Dermal):	3100 mg/kg Rat
LD50 (Oral):	1850 mg/kg Rat

Hydrocarbons, C12-C16, isoalkanes, cyclics, <2% aromatics

LD50 (Dermal):	2000 mg/kg
LD50 (Oral):	5000 mg/kg
LC50 (Inhalation vapours):	5,991 mg/l/4h

Hydrocarbons, C11-C13, isoalkanes, <2% aromatics

LD50 (Oral):	5000 mg/kg
LC50 (Inhalation vapours):	5 mg/l/4h

2,6,10-trimetilundec-9-enal

LD50 (Oral):	5000 mg/kg

Allyl (3-methylbutoxy)acetate

LD50 (Dermal):	2000 mg/kg
LD50 (Oral):	500 mg/kg
LC50 (Inhalation vapours):	0,43 mg/l/4h

trans-menthone

LD50 (Dermal):	5000 mg/kg
LD50 (Oral):	1950 mg/kg

SKIN CORROSION / IRRITATION
Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION
Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION
Sensitising for the skin

GERM CELL MUTAGENICITY
Does not meet the classification criteria for this hazard class

CARCINOGENICITY
Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY
Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE
Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE
Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD
Does not meet the classification criteria for this hazard class

11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

SECTION 12. Ecological information

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.

12.1. Toxicity

Eucalyptol

LC50 - for Fish	57 mg/l/96h
EC50 - for Crustacea	100 mg/l/48h
EC50 - for Algae / Aquatic Plants	74 mg/l/72h
EC10 for Algae / Aquatic Plants	37 mg/l/72h

2,6-dimethyloct-7-en-2-ol

LC50 - for Fish	27,8 mg/l/96h Oncorynchus mykiss; OECD 203
EC50 - for Crustacea	38 mg/l/48h Daphnia magna; OECD 202
EC50 - for Algae / Aquatic Plants	65 mg/l/72h Desmodesmus subcapitatus; OECD 201
Chronic NOEC for Crustacea	9,5 mg/l Daphnia magna; OECD 211

benzyl acetate

LC50 - for Fish	4 mg/l/96h
EC50 - for Crustacea	17 mg/l/48h
EC50 - for Algae / Aquatic Plants	92 mg/l/72h
EC10 for Algae / Aquatic Plants	52 mg/l/72h
Chronic NOEC for Fish	0,92 mg/l

3-methyl-5-phenylpentanol

LC50 - for Fish	13,3 mg/l/96h
EC50 - for Crustacea	13 mg/l/48h
EC50 - for Algae / Aquatic Plants	16 mg/l/72h
Chronic NOEC for Crustacea	10 mg/l
Chronic NOEC for Algae / Aquatic Plants	6,25 mg/l

Allyl (3-methylbutoxy)acetate

EC50 - for Algae / Aquatic Plants	2,06 mg/l/72h

2,6,10-trimetilundec-9-enal

EC50 - for Algae / Aquatic Plants	0,5877 mg/l/72h
EC10 for Algae / Aquatic Plants	0,288 mg/l/72h

trans-menthone

LC50 - for Fish	20,973 mg/l/96h
EC50 - for Algae / Aquatic Plants	13,399 mg/l/72h

12.2. Persistence and degradability

Eucalyptol

Solubility in water	2397 mg/l

Rapidly degradable

2,6-dimethyloct-7-en-2-ol

Rapidly degradable

benzyl acetate

Rapidly degradable

3-methyl-5-phenylpentanol

Solubility in water	390 mg/l @ 20 °C and pH 7

Rapidly degradable

Allyl (3-methylbutoxy)acetate

Solubility in water	0,001 mg/l

Rapidly degradable

2,6,10-trimetilundec-9-enal

Solubility in water	0,67 mg/l

Rapidly degradable

trans-menthone

Solubility in water	688 mg/l

12.3. Bioaccumulative potential

Eucalyptol

Partition coefficient: n-octanol/water	3,4 Log Kow
BCF	112 L/kg ww

3-methyl-5-phenylpentanol

Partition coefficient: n-octanol/water	2,7 Log Kow @ 30 °C

Allyl (3-methylbutoxy)acetate

Partition coefficient: n-octanol/water	1,96 Log Kow

2,6,10-trimetilundec-9-enal

Partition coefficient: n-octanol/water	6,2 Log Kow

trans-menthone

Partition coefficient: n-octanol/water	2,295 Log Kow

12.4. Mobility in soil

2,6-dimethyloct-7-en-2-ol

Partition coefficient soil/water: 2.25 l/kg

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

12.7. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.1. UN number or ID number
not applicable

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
Information not relevant

SECTION 15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Seveso Category - Directive 2012/18/EU: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product
Point 3 - 40

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors
not applicable

Substances in Candidate List (Art. 59 REACH)
On the basis of available data, the product does not contain any SVHC in percentage ≥ than 0,1%.

Substances subject to authorisation (Annex XIV REACH)
None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:
None

Substances subject to the Rotterdam Convention:
None

Substances subject to the Stockholm Convention:
None

Healthcare controls
Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.2. Chemical safety assessment
A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Flam. Liq. 3	Flammable liquid, category 3
Acute Tox. 1	Acute toxicity, category 1
Acute Tox. 4	Acute toxicity, category 4
Asp. Tox. 1	Aspiration hazard, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
Skin Sens. 1B	Skin sensitization, category 1B
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity, category 1
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H226	Flammable liquid and vapour.
H330	Fatal if inhaled.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)
- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

This Safety Data Sheet was drawn up on the basis of the information contained in the SDS (Rev.4 dated 11/17/2022) of the mixture supplier

Changes to previous review:

The following sections were modified: 02.

Emergency telephone numbers

For urgent safety information call the Anti-Poison Centre of your country:

	COUNTRY	CUSTOMER SERVICE NR.	ANTI-POISON CENTRE NR.
	AUSTRIA	(0043) 050 6700 2111	(0043) 01 406 43 43
	BELGIUM	(0032) 02 263 3333	(0032) 070 245 245
	BULGARIA	(00359) 0700 100 68	(00359) 2 9154 409
	CROATIA	(00385) 0130 40 333	(00385) 1 2348 342
	CZECK REP.	(00420) 840 111 313	(00420) 224 919 293 / +420 224 915 402
	DENEMARK	(0045) 448 802 22	(0045) 8212 1212
	FINLAND	(09) 61336 235	(09) 471977
	FRANCE	(0033) 09 69 39 1234	(0033) 01 4542 5959
	GERMAN	(0049) 0711 93533655	(0049) 0551 19240
	GREECE	(0030) 210 994 6400	(0030) 210 779 3777
	HOLLAND	(0031) 076 5306400	(0031) 030 274 8888
	HUNGARY	(0036) 1 999 5000	(0036) 802 011 99
	IRELAND	(00353) 0844 815 8989	(00353) 1 809 2566 / (00353) 1 837 9964
	ITALY	(0039) 02 20 30	Tel. (+39) 06.6859.3726 - Roma Tel. (+39) 06.4997.8000 - Roma Tel. (+39) 06.305.4343 - Roma Tel. 800.183.459 - Foggia Tel. (+39) 081.545.3333 - Napoli Tel. (+39) 055.794.7819 - Firenze Tel. (+39) 0382.24.444 - Pavia Tel. (+39) 02.66.1010.29 - Milano Tel. 800.88.33.00 - Bergamo Tel. 800.011.858 - Verona
	KAZAKISTAN	(007) 8 800 100 5731	(007) 3272 925 868
	NORWAY	(0047) 227 82580	(0047) 225 913 00
	POLAND	(0048) 801 900 666	(0048) 124 119 999
	PORTUGAL	(00351) 707 203 204	(00351) 808 250 143
	ROMANIAN	(0040) 0372 117 745	(0040) 213 183 606
	RUSSIA	(007) 8 800 3333 887	(007) 343 229 9857 (007) 495 628 1687 (007) 921 757 3228
	SERBIA	(00381) 11 30 65 674	(00381) 11 3608 440
	SLOVAKIA	(00421) 0850 003 007	(00421) 2 5477 4166
	SPAIN	(0034) 902 203 204	(0034) 91 562 0420
	SWEDEN	(0046) 0771 751570	(0046) 010 456 6700; 112 (national callers)
	SWISS	(0041) 0848 801 005	(0041) 44 251 51 51 (dial 145)
	UK	(0044) 0844 815 8989	(0044) 844 892 0111
	TURKEY	(0090) 444 5010	(0312) 433 70 01 or 800 314 7900
	UCRAIN	(00380) 0 800 30 20 30	(00380) 44 258 4773