Techno Solv Eco 5l

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

* **1.1. Product identifier**

Trade name/designation:

Techno Solv Eco 5l

Article No.:
T110233

UFI:
N3KP-YUUK-MAQ5-88UK

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

Use of the substance/mixture:
Solvent mixture for removing adhesives

1.3. Details of the supplier of the safety data sheet

Supplier:

KANDO Service GmbH
Hartleitnerstraße 3
4653 Eberstalzell
Austria
Telephone: +43 (0) 7241 213 79
E-mail: msds@kando.eu

1.4. Emergency telephone number

Vergiftungsinformationszentrale (VIZ), Stubenring 6, 1010 Wien, 24h: 01 406 43 43, Montag - Freitag: 8 bis 16 Uhr, Tel.: 01 406 68 98 (keine medizinische Auskunft) (Only available during office hours.)

SECTION 2: Hazards identification

* **2.1. Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Aspiration hazard *(Asp. Tox. 1)*	H304: May be fatal if swallowed and enters airways.	
Skin corrosion/irritation *(Skin Irrit. 2)*	H315: Causes skin irritation.	
Respiratory or skin sensitisation *(Skin Sens. 1B)*	H317: May cause an allergic skin reaction.	
Serious eye damage/eye irritation *(Eye Irrit. 2)*	H319: Causes serious eye irritation.	
Acute toxicity (inhalative) *(Acute Tox. 3)*	H331: Toxic if inhaled.	
Hazardous to the aquatic environment *(Aquatic Chronic 2)*	H411: Toxic to aquatic life with long lasting effects.	

Additional information:
The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]. The product must be accompanied by a safety data sheet in accordance with the provisions of Regulation (EU) 2020/878. For further information on health hazards: see section 11. For further information on ecological hazards: see section 12.

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2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms:

GHS08
Health hazard

GHS09
Environment

GHS06
Skull and crossbones

Signal word: Danger

Hazard components for labelling:
(R)-p-mentha-1,8-diene; C11-14 cyclic isoalkane hydrocarbons < 2 % aromatic; 2-butoxyethanol

Hazard statements for health hazards	
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.
H331	Toxic if inhaled.

Hazard statements for environmental hazards	
H411	Toxic to aquatic life with long lasting effects.

Supplemental hazard information: none

Precautionary statements Prevention	
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/ .

Precautionary statements Response	
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/ .
P331	Do NOT induce vomiting.
P391	Collect spillage.

Precautionary statements Storage	
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.

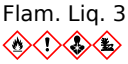
2.3. Other hazards

Other adverse effects:
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 any substances with endocrine-disrupting properties in concentrations of ≥ 0.1%.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
EC No.: 927-285-2 REACH No.: 01-2119480162-45	**C11-14 cyclic isoalkane hydrocarbons < 2 % aromatic** Asp. Tox. 1 (H304)  Danger **Acute Toxicity Estimate** ATE (oral) > 2,000 mg/kg ATE (dermal) > 2,000 mg/kg ATE (inhalation, vapour) 5,000 mg/L	≥ 50 – < 54 weight-%
CAS No.: 111-76-2 EC No.: 203-905-0 Index No.: 603-014-00-0 REACH No.: 01-2119475108-36-XXXX	**2-butoxyethanol** Acute Tox. 3 (H331), Acute Tox. 4 (H302), Eye Irrit. 2 (H319), Skin Irrit. 2 (H315)  Danger **Acute Toxicity Estimate** ATE (oral) 1,200 mg/kg ATE (dermal) 2,000 mg/kg ATE (inhalation, vapour) 3 mg/L	≥ 30 – < 32.5 weight-%
CAS No.: 5989-27-5 EC No.: 227-813-5 Index No.: 601-096-00-2 REACH No.: 01-2119529223-47	**(R)-p-mentha-1,8-diene** Aquatic Acute 1 (H400), Aquatic Chronic 3 (H412), Asp. Tox. 1 (H304), Flam. Liq. 3 (H226), Skin Irrit. 2 (H315), Skin Sens. 1B (H317)  Danger M-factor (acute): 1 **Acute Toxicity Estimate** ATE (oral) > 2,000 mg/kg ATE (dermal) > 5,000 mg/kg	≥ 19.5 – < 21 weight-%

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

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4.1. Description of first aid measures

General information:
If in doubt or if symptoms occur, consult a doctor and show them this document. In the event of severe symptoms, call the emergency services immediately.

Following inhalation:
The person concerned shall be carried outside, away from the scene of the accident. If breathing stops, artificial respiration shall be given. Where appropriate artificial ventilation. If unconscious but breathing normally, place in recovery position and seek medical advice.

In case of skin contact:
Take off immediately all contaminated clothing. Wash with plenty of water. A doctor must be consulted immediately. Avoid contact with contaminated clothing.

After eye contact:
Any contact lenses must be removed. One must immediately and extensively wash with water for at least 15 minutes, opening the eyelids well. A doctor must be consulted immediately.

Following ingestion:
Do not induce vomiting unless explicitly authorised by a doctor. Never give anything by mouth to an unconscious person or a person with cramps. A doctor must be consulted immediately.

Self-protection of the first aider:
Use personal protection equipment. The type of equipment depends on the hazardousness of the substance or mixture, the type of exposure and the extent of contamination. If no further specific information is given, disposable gloves should be worn in case of possible contact with biological fluids. For further information on personal protective equipment: see section 8.

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

There is no known specific information on symptoms and effects caused by this product.

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

IF SWALLOWED: Immediately call a POISON CENTER/doctor.
In case of skin contact, Eye contact: Wash with plenty of water/soap.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Carbon dioxide Foam, Powder-, Water mist

Unsuitable extinguishing media:

Nothing special.

5.2. Special hazards arising from the substance or mixture

Avoid inhalation of combustion products.

5.3. Advice for firefighters

The containers shall be cooled with water jets to prevent the decomposition of the product and the formation of potentially harmful substances. Complete fire protective clothing shall be worn at all times. Extinguishing water that is not allowed to enter the sewage pipes shall be collected. The water used for extinguishing and the fire residues shall be taken up in accordance with the regulations in force.

Personal protection: Normal firefighting clothing, e.g. an open-circuit compressed air respirator (EN 137) firefighting kit (EN469), firefighting gloves (EN 659) and firefighting boots (HO A 29 or A30)

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:

The leakage may be blocked if there is no danger. Appropriate protective devices (including personal protective devices as per para. 8 from the safety instructions) shall be put on to prevent contamination of skin, eyes and personal clothing. These instructions apply to both reprocessing supervisors and emergency stop interventions.

6.1.2. For emergency responders

Personal protection equipment:

Normal firefighting clothing, e.g. an open-circuit compressed air respirator (EN 137) firefighting kit (EN469), firefighting gloves (EN 659) and firefighting boots (HO A 29 or A30)

6.2. Environmental precautions

Prevent the product from entering waste water, surface water, ground water.

6.3. Methods and material for containment and cleaning up

Other information:

The spilled product must be sucked into a suitable container. The container to be used shall be tested for compatibility with the product, subject to section 10. The residual product shall be absorbed with inert absorbent material. Adequate ventilation of the affected area shall be provided. Contaminated material must be disposed of in accordance with the regulations in section 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

Protective measures

Advices on safe handling:

Keep away from heat, sparks and free flame, refrain from smoking and use of matches or lighters. Without the necessary ventilation, vapours may accumulate in the lower layers near the floor and may also ignite remotely with the risk of flashback. Accumulation of electrostatic charges must be avoided.

Eating, drinking and smoking are prohibited during product use. Wetted clothing and protective devices must be removed before entering the eating area. Avoid dispersal of the product in the environment.

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

Requirements for storage rooms and vessels:
Store only in original containers. It must be stored in a cool and well-ventilated place, away from heat sources, free flame, sparks and other sources of ignition. The containers must be kept away from any incompatible materials, whereby reference must be made to section 10.

Storage class (TRGS 510, Germany): 3 – Flammable liquids

7.3. Specific end use(s)

Recommendation:
Data not available.

SECTION 8: Exposure controls/personal protection

* **8.1. Control parameters**

8.1.1. Occupational exposure limit values

Limit value type (country of origin)	**Substance name**	**① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark**
MAK (AT)	**2-butoxyethanol** CAS No.: 111-76-2 EC No.: 203-905-0	② 40 ppm (200 mg/m³) ⑤ (max. 4x30 min./Schicht, kann über die Haut aufgenommen werden) H
IOELV (EU)	**2-butoxyethanol** CAS No.: 111-76-2 EC No.: 203-905-0	① 20 ppm (98 mg/m³) ② 50 ppm (246 mg/m³) ⑤ (may be absorbed through the skin)
MAK (AT)	**2-butoxyethanol** CAS No.: 111-76-2 EC No.: 203-905-0	① 20 ppm (98 mg/m³) ⑤ (kann über die Haut aufgenommen werden) H

8.1.2. Biological limit values
No data available

8.1.3. DNEL-/PNEC-values

Substance name	**DNEL value**	**① DNEL type ② Exposure route**
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	98 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	59 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	1,091 mg/m³	① DNEL worker ② Acute - inhalation, systemic effects
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	426 mg/m³	① DNEL Consumer ② Acute - inhalation, systemic effects
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	147 mg/m³	① DNEL Consumer ② Acute - inhalation, local effects
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	10.3 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects

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Substance name	DNEL value	① DNEL type ② Exposure route
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	26.7 mg/kg bw/day	① DNEL Consumer ② Acute – dermal, systemic effects
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	6.3 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects
(R)-p-mentha-1,8-diene CAS No.: 5989-27-5 EC No.: 227-813-5	33.3 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
(R)-p-mentha-1,8-diene CAS No.: 5989-27-5 EC No.: 227-813-5	8.3 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
(R)-p-mentha-1,8-diene CAS No.: 5989-27-5 EC No.: 227-813-5	0.222 mg/kg	① DNEL worker ② Acute - dermal, local effects
(R)-p-mentha-1,8-diene CAS No.: 5989-27-5 EC No.: 227-813-5	0.111 mg/kg	① DNEL Consumer ② Acute - dermal, local effects
(R)-p-mentha-1,8-diene CAS No.: 5989-27-5 EC No.: 227-813-5	4.76 mg/kg	① DNEL Consumer ② Long-term - oral, systemic effects

Substance name	PNEC Value	① PNEC type
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	8.8 mg/L	① PNEC aquatic, marine water
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	463 mg/L	① PNEC sewage treatment plant
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	0.88 mg/L	① PNEC sediment, freshwater
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	3.46 mg/L	① PNEC sediment, marine water
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	8.14 mg/kg	① PNEC soil
(R)-p-mentha-1,8-diene CAS No.: 5989-27-5 EC No.: 227-813-5	0.0054 mg/L	① PNEC aquatic, freshwater
(R)-p-mentha-1,8-diene CAS No.: 5989-27-5 EC No.: 227-813-5	0.00054 mg/L	① PNEC aquatic, marine water
(R)-p-mentha-1,8-diene CAS No.: 5989-27-5 EC No.: 227-813-5	1.8 mg/L	① PNEC sewage treatment plant
(R)-p-mentha-1,8-diene CAS No.: 5989-27-5 EC No.: 227-813-5	1.32 mg/kg	① PNEC sediment, freshwater
(R)-p-mentha-1,8-diene CAS No.: 5989-27-5 EC No.: 227-813-5	0.13 mg/kg	① PNEC sediment, marine water
(R)-p-mentha-1,8-diene CAS No.: 5989-27-5 EC No.: 227-813-5	0.262 mg/kg	① PNEC soil
(R)-p-mentha-1,8-diene CAS No.: 5989-27-5 EC No.: 227-813-5	3.33 mg/kg	① PNEC secondary poisoning

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No data available

8.2.2. Personal protection equipment

Eye/face protection:

The use of penetration-proof goggles is recommended (ref. standard EN 166).

Skin protection:

Hand protection:
The hands must be protected with category III work gloves (ref. standard EN 374). For the final choice of material for the work gloves, the following aspects must be included: Compatibility, degradation, breaking time and permeability. In the case of preparations, the work glove resistance to chemical agents must be tested before use, as it is unpredictable. Glove wear time is conditioned by exposure time and modes of use.

Skin protection:
Work clothing with long sleeves and category II accident protection shoes must be worn (see Regulation 2016/425 and standard EN ISO 20344). After taking off the protective clothing, one must wash with soap and water.

Respiratory protection:

If the threshold value (e.g. TLV-TWA) of the substance or one or more substances contained in the product is exceeded, it is advisable to wear a mask with a type A filter, the class of which (1, 2 or 3) should be selected according to the highest concentration used. (Ref. standard EN 14387). In the presence of gases or vapours of a different nature and/or gases or vapours containing particles (aerosol, smoke, mist, etc.), use combined filters. If the technical measures taken are not sufficient to reduce the exposure of the worker to the thresholds considered, the use of respiratory protective devices is necessary. The protection provided by the mask is limited in any case.
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.

Other protection measures:

Considering that appropriate protective measures should always take precedence over personal protective clothing, ensure that the workplace is well ventilated by effective local exhaust ventilation. For the selection of personal protective equipment, the trusted chemical manufacturers may need to be consulted. The personal protective equipment must be CE marked to indicate its suitability for the applicable regulations.
Emergency stop showers with face-eye-rinsing are to be provided.

8.2.3. Environmental exposure controls

Emissions from manufacturing processes, including those from ventilation equipment, should be checked for compliance with environmental legislation. Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid
Colour: colourless
Odour: characteristic
flammability: No data available

Safety relevant basis data

Parameter	Value	① Method ② Remark
pH	*No data available*	
Melting point	*No data available*	
Freezing point	*No data available*	
Initial boiling point and boiling range	*No data available*	
Flash point	> 62 °C	

Parameter	Value	① Method ② Remark
Evaporation rate	*No data available*	
Auto-ignition temperature	*No data available*	
Upper/lower flammability or explosive limits	*No data available*	
Vapour pressure	*No data available*	
Vapour density	*No data available*	
Density	0.83 mg/L	
Bulk density	*not applicable*	
Water solubility	practically insoluble	
Dynamic viscosity	*No data available*	
Kinematic viscosity	*No data available*	

9.2. Other information
No data available

SECTION 10: Stability and reactivity

10.1. Reactivity
No special reaction hazards with other substances under normal conditions of use.
2-butoxyethanol: Decomposes under the influence of heat.

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

10.3. Possibility of hazardous reactions
Vapours can form explosive mixtures with air.
2-butoxyethanol: : May react dangerously with: Aluminium, Oxidizing agent Forms peroxides with: Air.

10.4. Conditions to avoid
Avoid heating. Accumulation of electrostatic charges must be avoided. Keep away from sources of ignition - No smoking.
2-butoxyethanol: Avoid exposure to: Heat sources, open flames

10.5. Incompatible materials
Data not available.

10.6. Hazardous decomposition products
Vapours potentially hazardous to health may be formed by thermal decomposition or in case of fire.
2-butoxyethanol: Can develop: Hydrogen

SECTION 11: Toxicological information

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

Toxicological information

Acute Toxicity Estimate for Mixtures
ATE (oral): >2,000 mg/kg
ATE (inhalation, vapour): 9.23 mg/L
C11-14 cyclic isoalkane hydrocarbons < 2 % aromatic EC No.: 927-285-2
LD_{50} oral: >2,000 mg/kg (Ratte) OECD TG
LD_{50} dermal: >2,000 mg/kg (Kaninchen)
LC_{50} Acute inhalation toxicity (vapour): 5,000 mg/L 4 h (Ratte) OCSE 403O

2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0
ATE (oral)[1]: 1,200 mg/kg
ATE (inhalation, vapour)[1]: 3 mg/L
LD_{50} oral: 300 mg/kg (Kaninchen)
LD_{50} dermal: 2,000 mg/kg (Rabbit)
LC_{50} Acute inhalation toxicity (vapour): 2.2 mg/L (Rat)

[1]: Acute Toxicity Estimate. Harmonised (legal) classification.

Acute oral toxicity:
Based on available data, the classification criteria are not met.

Acute dermal toxicity:
Based on available data, the classification criteria are not met.

Acute inhalation toxicity:
Based on available data, the classification criteria are not met.

Skin corrosion/irritation:
Causes skin irritation.

Serious eye damage/irritation:
Causes serious eye irritation.

Respiratory or skin sensitisation:
Sensitising to the skin

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:
toxic

Additional information:
As no experimental toxicological data on the product are available, the possible health risks were evaluated on the properties of the substances contained according to the criteria of the reference standards for classification. For the evaluation of toxicological effects in case of product exposure, the concentrations of the individual pollutants possibly listed under para. 3 have to be considered.

*
11.2. Information on other hazards

Other information:
According to the available data, the product does not contain any substances included in the main European lists of potential or suspected endocrine disruptors with effects on human health to be assessed.

water hazard class 2: hazardous to water

SECTION 12: Ecological information

12.1. Toxicity

C11-14 cyclic isoalkane hydrocarbons < 2 % aromatic EC No.: 927-285-2
LC_{50}: >1,000 mg/L 4 d (fish, Oncorhynchus mykiss)
EC_{50}: >1,000 mg/L 2 d (crustaceans, Daphnia magna)
EC_{50}: >1,000 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata)

2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	
LC_{50}: 1,490 mg/L (fish, Lepomis macrochirus)	
LC_{50}: 1,464 mg/L 4 d (fish, Oncorhynchus mykiss)	
EC_{50}: 911 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata)	
EC_{50}: 1,800 mg/L 2 d (crustaceans, Daphnia magna)	
NOEC: 88 mg/L (Algae/water plant, Pseudokirchneriella subcapitata)	
(R)-p-mentha-1,8-diene CAS No.: 5989-27-5 EC No.: 227-813-5	
LC_{50}: 35 mg/L 4 d (fish, Oncorhynchus mykiss)	
EC_{50}: 69.6 mg/L 2 d (crustaceans, Daphnia pulex)	

Additional ecotoxicological information:
The product must be considered environmentally hazardous and is toxic to aquatic life. In the long term, it can cause negative effects in the aquatic environment.

12.2. Persistence and degradability

C11-14 cyclic isoalkane hydrocarbons < 2 % aromatic EC No.: 927-285-2	
Biodegradation: Yes, rapidly	
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	
Biodegradation: Yes, rapidly	
Remark: 1000 - 10000 mg/L	
(R)-p-mentha-1,8-diene CAS No.: 5989-27-5 EC No.: 227-813-5	
Biodegradation: Yes, rapidly	

12.3. Bioaccumulative potential

2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	
Log K_{OW}: 0.81	
(R)-p-mentha-1,8-diene CAS No.: 5989-27-5 EC No.: 227-813-5	
Log K_{OW}: 4.83	
Bioconcentration factor (BCF): 1,022	

12.4. Mobility in soil
No data available

12.5. Results of PBT and vPvB assessment

C11-14 cyclic isoalkane hydrocarbons < 2 % aromatic EC No.: 927-285-2	
Results of PBT and vPvB assessment: —	
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	
Results of PBT and vPvB assessment: —	
(R)-p-mentha-1,8-diene CAS No.: 5989-27-5 EC No.: 227-813-5	
Results of PBT and vPvB assessment: —	

Based on the available information, the product does not contain any PBT or vPvB substances in content percentages ≥ 0.1%.

12.6. Endocrine disrupting properties
According to the available data, the product does not contain any substances included in the main European lists of potential or suspected endocrine disruptors with environmental effects to be assessed.

12.7. Other adverse effects
No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Reuse if possible. Product residues are to be considered as hazardous waste. The hazardousness of the waste partially containing this product must be evaluated on the basis of the legal provisions in

force. Disposal must be entrusted to a company authorised for waste management, taking into account national and, where applicable, local regulations.
The transport of the waste may be subject to ADR.

Waste treatment options

Appropriate disposal / Package:
Contaminated packaging material must be sent for recycling or disposal in accordance with the country's waste management regulations.

SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1. UN number or ID number			
UN 3082	UN 3082	UN 3082	UN 3082
14.2. UN proper shipping name			
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((R)-p-mentha-1,8-diene)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((R)-p-mentha-1,8-diene)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((R)-p-mentha-1,8-diene)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((R)-p-mentha-1,8-diene)
14.3. Transport hazard class(es)			
 9	 9	 9	 9
14.4. Packing group			
III	III	III	III
14.5. Environmental hazards			
		 MARINE POLLUTANT	
* **14.6. Special precautions for user**			
Special Provisions: 274 | 335 | 375 | 601 **Limited quantity (LQ):** 5 L **Excepted Quantities (EQ):** E1 **Hazard identification number (Kemler No.):** 90 **Classification code:** - **Tunnel restriction code:** (-) **Remark:** This product is not subject to the provisions of ADR/RID according to special provision 375 if it is transported in individual or inner packagings ≤ 5kg/L.	No data available	**Limited quantity (LQ):** 5 L **EmS-No.:** F-A, S-F **Remark:** This product is not subject to the provisions of the IMDG Code, subsection 2.10.2.7. when transported in individual or inner packagings ≤ 5kg/L. Packaging details 964	**Special Provisions:** A97 | A158 | A197 | A215 **Remark:** This product is not subject to IATA Dangerous Goods Regulations according to Special Provision A197 when transported in individual or inner packagings ≤ 5kg/L. IATA Maximum Quantity - Cargo:450L IATA Maximum Quantity - Passenger: 450L Packaging details 964

14.7. Maritime transport in bulk according to IMO instruments
No data available

SECTION 15: Regulatory information

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

15.1.1. EU legislation

Restrictions on use:

Seveso category - Directive 2012/18/EU: H2-E2
Restrictions on the product or substances according to Annex XVII Regulation (EC) 1907/2006:
Product point 3-40
Substances contained point 75
Regulation (EU) 2019/1148 (marketing and use of explosives precursors): not applicable
Substances according to Candidate List (Art. 59 REACH): Based on the available information, the product does not contain SVHC substances in percentages ≥ 0.1%.
Substances subject to authorisation (Annex XIV REACH): none
Substances subject to export notification Regulation (EU) 649/2012: none
Substances subject to the Rotterdam Convention: none
\P:302e7a5b-6f05-46cb-b218-145d1a3f5b6c\ none
Preventive medical check-ups: No precautionary examinations are required when working with this product. This is only on condition that the results of the risk assessment prove that there is only a moderate risk to the safety and health of workers and that the measures provided for by Directive 98/24/EC are sufficient to limit the risk.

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds:

Volatile organic compounds (VOC) content in percent by weight: 100 weight-%

15.1.2. National regulations

No data available

* **15.2. Chemical Safety Assessment**

For the following substances of this mixture a chemical safety assessment has been carried out:
C11-14 cyclic isoalkane hydrocarbons < 2 % aromatic
2-butoxyethanol

SECTION 16: Other information

* **16.1. Indication of changes**

1.1.	Product identifier
2.1.	Classification of the substance or mixture
2.2.	Label elements
4.1.	Description of first aid measures
4.3.	Indication of any immediate medical attention and special treatment needed
7.2.	Conditions for safe storage, including any incompatibilities
8.1.	Control parameters
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008
11.2.	Information on other hazards
14.6.	Special precautions for user
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture
15.2.	Chemical Safety Assessment
16.1.	Indication of changes

16.2. Abbreviations and acronyms

ACGIH	American Conference of Governmental Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
DIN	German Institute for Standardization / German Industrial Standard

DNEL	derived no-effect level
EC_{50}	Effective Concentration 50%
EN	European Standard
ES	Exposure scenario
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
KG	body weight
LC_{50}	Lethal (fatal) Concentration 50%
LD_{50}	Lethal (fatal) Dose 50%
MAK	Maximum concentration in the workplace air (CH)
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety & Health
NOEC	No Observed Effect Concentration
OECD	Organisation for Economic Cooperation and Development
OEL	Threshold Limit Value
OSHA	Occupational Safety & Health Administration
PBT	persistent and bioaccumulative and toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation and Authorization of Chemicals
RID	Dangerous goods regulations for transport by rail
TRGS	Technische Regeln für Gefahrstoffe
UN	United Nations
VOC	Volatile organic compounds

16.3. Key literature references and sources for data

No data available

16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Aspiration hazard *(Asp. Tox. 1)*	H304: May be fatal if swallowed and enters airways.	
Skin corrosion/irritation *(Skin Irrit. 2)*	H315: Causes skin irritation.	
Respiratory or skin sensitisation *(Skin Sens. 1B)*	H317: May cause an allergic skin reaction.	
Serious eye damage/eye irritation *(Eye Irrit. 2)*	H319: Causes serious eye irritation.	
Acute toxicity (inhalative) *(Acute Tox. 3)*	H331: Toxic if inhaled.	
Hazardous to the aquatic environment *(Aquatic Chronic 2)*	H411: Toxic to aquatic life with long lasting effects.	

16.5. List of relevant hazard statements and/or precautionary statements from sections 2 to 15

Hazard statements	
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
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.
H331	Toxic if inhaled.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

16.6. Training advice
No data available

16.7. Additional information
No data available

* Data changed compared with the previous version.