Ultrasolv 1l

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

1.1. Product identifier

Trade name/designation:

Ultrasolv 1l

Article No.:
T689001

Index No.:
606-002-00-3

UFI:
HR2A-DXUR-050V-AE57

REACH No.:
01-2119457290-43

CAS No.:
78-93-3

EC No.:
201-159-0

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

Relevant identified uses:

	Product Categories [PC]
PC 9a:	Coatings and paints, thinners, paint removers
PC 35:	Washing and cleaning products

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

distributor:

TECH-MASTERS Austria GmbH
Gewerbestraße 1
4720 Kallham
Austria
Telephone: +43 7733 20090
Telefax: +43 7733 20092
E-mail: info@tech-masters.at
Website: www.tech-masters.com/at

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
flammable liquids *(Flam. Liq. 2)*	H225: Highly flammable liquid and vapour.	On basis of test data.
Serious eye damage/eye irritation *(Eye Irrit. 2)*	H319: Causes serious eye irritation.	Calculation method.
STOT-single exposure *(STOT SE 3)*	H336: May cause drowsiness or dizziness.	Calculation method.

*
2.2. Label elements

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

Hazard pictograms:

GHS07
Exclamation mark

GHS02
Flame

Signal word: Danger

Hazard components for labelling:
butanone

Hazard statements for physical hazards	
H225	Highly flammable liquid and vapour.

Hazard statements for health hazards	
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Supplemental hazard information	
EUH066	Repeated exposure may cause skin dryness or cracking.

Precautionary statements Prevention	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.

Precautionary statements Response	
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER/doctor/ if you feel unwell.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P370 + P378	In case of fire: Use Dry chemicals, Carbon dioxide (CO2), Spray water, alcohol resistant foam to extinguish.

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

Precautionary statements Disposal	
P501	Dispose of contents/container to an appropriate recycling or disposal facility.

*
2.3. Other hazards

Other adverse effects:
This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
This product does not contain any known or suspected endocrine disruptors.

SECTION 3: Composition/information on ingredients

3.1. Substances

Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 78-93-3 EC No.: 201-159-0 Index No.: 606-002-00-3 REACH No.: 01-2119457290-43	**butanone** Eye Irrit. 2 (H319), Flam. Liq. 2 (H225), STOT SE 3 (H336)  Danger EUH066 **Acute Toxicity Estimate** ATE (oral) > 2,193 mg/kg ATE (dermal) > 5,000 mg/kg ATE (inhalation, vapour) 40 mg/L **Additional information:** EUH066	90 – 100 weight-%

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

SECTION 4: First aid measures

* **4.1. Description of first aid measures**

General information:
Make safety data sheet available to the doctor.

Following inhalation:
Provide fresh air. IF exposed or concerned: Get medical advice/attention.

In case of skin contact:
Change contaminated, saturated clothing. After contact with skin, wash immediately with plenty of water and soap.

After eye contact:
Rinse opened eye immediately with plenty of water for at least 15 minutes. Remove contact lenses. If symptoms persist, consult a doctor.

Following ingestion:
Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person or a person with cramps. Call a physician immediately.

Self-protection of the first aider:
Remove all sources of ignition. Ensure that medical personnel are aware of the substance(s) involved, take measures to protect themselves and prevent the spread of contamination. Use personal protective equipment as required. For further information on personal protective equipment: see section 8.

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

Eye redness, tearing of the eyes, Dizziness, Headache, Nausea, Vomiting; May cause drowsiness or dizziness.

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

Treat symptomatically.

SECTION 5: Firefighting measures

* **5.1. Extinguishing media**

Suitable extinguishing media:
Dry extinguishing powder, alcohol resistant foam, Carbon dioxide (CO2), Water spray jet

Unsuitable extinguishing media:
Do not disperse leaked material with a high-pressure water jet.

* **5.2. Special hazards arising from the substance or mixture**

Risk of ignition Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. In case of fire, cool containers with water spray. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Dispose of waste according to applicable legislation.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Protective clothing.

SECTION 6: Accidental release measures

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

6.1.1. For non-emergency personnel

Personal precautions:

Remove person from danger zone. Use personal protective equipment as required. Ensure good ventilation/extraction at the workplace. Keep people away from the spill/leak and send them to the side facing the wind. Remove all sources of ignition. No open fire, no sparks and no smoking. Take precautionary measures against static discharge. All tools must be earthed. Do not touch spilled material and do not walk through it. Ventilate affected area.

6.1.2. For emergency responders

Personal protection equipment:

Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

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

For containment:

Stop and contain spill/release if it can be done safely. If this cannot be done, allow fire to burn under control. Do not touch spilled material and do not walk through it. Absorb with liquid-binding material (sand, diatomaceous earth, acid binder, universal binder, sawdust).

For cleaning up:

Take precautionary measures against static discharge. For large quantities: Contain. Pump off product. Take up mechanically, placing in appropriate containers for disposal.

Other information:

Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

See section 7 for further information on safe handling.
For further information on personal protective equipment: see section 8.
For further information on disposal: see section 13.

SECTION 7: Handling and storage

* ### 7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

Use personal protection equipment. Avoid breathing dust/fume/gas/mist/vapours/spray. Containers in which this material is transported must be earthed and sealed to prevent static discharge, fire or explosion. Devices with local exhaust. Use spark-proof tools and explosion-proof equipment. Store in areas where a sprinkler system is installed. Only use in accordance with the instructions for use. Observance of good industrial hygiene is recommended. Avoid contact with skin, eyes and clothes. Wear protective gloves and eye protection/face protection.

Fire prevent measures:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Measures to prevent aerosol and dust generation:

Vapours/aerosols should be exhausted directly at the point of origin. Use only in well-ventilated areas.

Environmental precautions:

Shafts and sewers must be protected from entry of the product.

Advices on general occupational hygiene

Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and after work. Wear protective gloves/protective clothing and eye protection/face protection.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:
Keep container tightly closed. Store in a cool, dry place in well-sealed containers. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep/Store only in original container. Do not store near sources of ignition. Store in accordance with: National regulatory information & Regional regulatory information.

Packaging materials:
Keep/Store only in original container.

Requirements for storage rooms and vessels:
Use spark-proof tools and explosion-proof equipment. Store in areas where a sprinkler system is installed.

Hints on storage assembly:
Flammable Liquids, Category 3

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

Further information on storage conditions:
No information available.

7.3. Specific end use(s)

Recommendation:
No further relevant information 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)	**butanone** CAS No.: 78-93-3 EC No.: 201-159-0	① 100 ppm (295 mg/m³) ⑤ (kann über die Haut aufgenommen werden) H
MAK (AT)	**butanone** CAS No.: 78-93-3 EC No.: 201-159-0	② 200 ppm (590 mg/m³) ⑤ (max. 4x30 min./Schicht, kann über die Haut aufgenommen werden) H
IOELV (EU)	**butanone** CAS No.: 78-93-3 EC No.: 201-159-0	① 200 ppm (600 mg/m³) ② 300 ppm (900 mg/m³)

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
butanone CAS No.: 78-93-3 EC No.: 201-159-0	600 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
butanone CAS No.: 78-93-3 EC No.: 201-159-0	106 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
butanone CAS No.: 78-93-3 EC No.: 201-159-0	1,161 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
butanone CAS No.: 78-93-3 EC No.: 201-159-0	412 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects

Substance name	DNEL value	① DNEL type ② Exposure route
butanone CAS No.: 78-93-3 EC No.: 201-159-0	31 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects

*
8.2. Exposure controls

8.2.1. Appropriate engineering controls
No data available

8.2.2. Personal protection equipment

Eye/face protection:
Tight-fitting safety goggles EN 166

Skin protection:
Hand protection:
Impermeable protective gloves; Butyl caoutchouc (butyl rubber); Thickness of the glove material: 0,5 mm; Breakthrough time:>=480 min.

Body protection:
Wear suitable protective clothing when working. Wear anti-static footwear and clothing

Respiratory protection:
No protective equipment is required under normal conditions of use. Ventilation and evacuation may be necessary if exposure limits are exceeded or if irritation occurs. Filter type: ABEK; 2P3

8.2.3. Environmental exposure controls
No data available

SECTION 9: Physical and chemical properties

*
9.1. Information on basic physical and chemical properties

Appearance

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

Form: Liquid
Odour: characteristic

Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	*not applicable*		
Melting point	-86 °C		
Freezing point	-86 °C		
Initial boiling point and boiling range	80 °C		
Flash point	-9 °C		① DIN 51755 Part 1
Evaporation rate	*No data available*		
Auto-ignition temperature	*No data available*		
Upper/lower flammability or explosive limits	1.5 – 12.6 Vol-%		
Vapour pressure	101 hPa	20 °C	
Vapour density	*No data available*		
Density	0.805 g/cm³	20 °C	
Bulk density	*not applicable*		
Water solubility	270 – 290 g/L	20 °C	
Partition coefficient: n-octanol/water	0.3		

Parameter	Value	at °C	① Method ② Remark
Dynamic viscosity	*No data available*		
Kinematic viscosity	*No data available*		
Self ignition temperature	404 °C		

9.2. Other information
No data available

SECTION 10: Stability and reactivity

10.1. Reactivity
No information available.

* **10.2. Chemical stability**
The product is stable under storage at normal ambient temperatures.
electrostatic discharge

10.3. Possibility of hazardous reactions
No dangerous reactions known.

10.4. Conditions to avoid
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

* **10.5. Incompatible materials**
No data available

* **10.6. Hazardous decomposition products**
No data available

SECTION 11: Toxicological information

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

butanone CAS No.: 78-93-3 EC No.: 201-159-0
LD_{50} oral: >2,193 mg/kg (Rat)
LD_{50} dermal: >5,000 mg/kg (Rabbit)
LC_{50} Acute inhalation toxicity (vapour): 40 mg/L (Mouse)

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:
Repeated exposure may cause skin dryness or cracking.

Serious eye damage/irritation:
Causes serious eye irritation.

Respiratory or skin sensitisation:
Based on available data, the classification criteria are not met.

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:
May cause drowsiness or dizziness.

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.

Additional information:
Information on probable routes of exposure:
inhalation: Irritation to respiratory tract. May cause drowsiness or dizziness.
Eye contact: Causes serious eye irritation. Redness Pain
Dermal: May cause irritation.
oral: Nausea, Vomiting, Diarrhea

11.2. Information on other hazards
No data available

SECTION 12: Ecological information

12.1. Toxicity

butanone CAS No.: 78-93-3 EC No.: 201-159-0
LC_{50}: 2,993 mg/L 4 d (fish, Pimephales promelas) OECD 203
LC_{50}: 2,993 mg/L 4 d (Pimephales promelas)
LC_{50}: 2.993 mg/L 4 d (fish, Elritze)
EC_{50}: 308 mg/L 2 d (crustaceans, Daphnia magna) OECD 202
EC_{50}: 308 mg/L 2 d (Daphnia magna)
EC_{50}: 2.029 mg/L 4 d (Algae/water plant, Grünalge)
NOEC: 1.15 mg/L (Algae/water plant, Bacteria)
NOEC: 100 mg/L 21 d (Algae/water plant, Wasserfloh)
ErC_{50}: 1,972 mg/L 3 d (Algae/water plant, Pseudokirchnerella subcapitata) OECD 201

12.2. Persistence and degradability

butanone CAS No.: 78-93-3 EC No.: 201-159-0
Biodegradation: Yes, rapidly

12.3. Bioaccumulative potential

butanone CAS No.: 78-93-3 EC No.: 201-159-0
Log K_{OW}: 0.29

Partition coefficient: n-octanol/water:
0.3

12.4. Mobility in soil
No data available

12.5. Results of PBT and vPvB assessment

butanone CAS No.: 78-93-3 EC No.: 201-159-0
Results of PBT and vPvB assessment: —

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties
No data available

12.7. Other adverse effects
water hazard class 1: slightly hazardous to water

SECTION 13: Disposal considerations

* **13.1. Waste treatment methods**
Avoid release to the environment. Dispose of waste according to applicable legislation.

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product

07 01 04 *	other organic solvents, washing liquids and mother liquors

**: Evidence for disposal must be provided.*

Waste treatment options

Appropriate disposal / Package:

Empty containers pose a potential fire and explosion hazard. Do not cut, pierce or weld containers.

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 1193	UN 1193	UN 1193	UN 1193
14.2. UN proper shipping name			
ETHYL METHYL KETON (METHYL ETHYL KETONE)	ETHYL METHYL KETON (METHYL ETHYL KETONE)	ETHYL METHYL KETON (METHYL ETHYL KETONE)	ETHYL METHYL KETON (METHYL ETHYL KETONE)
14.3. Transport hazard class(es)			
 3	 3	 3	 3
14.4. Packing group			
II	II	II	II
14.5. Environmental hazards			
No	No	No	No
14.6. Special precautions for user			
Limited quantity (LQ): 1 L **Excepted Quantities (EQ):** E2 **Hazard identification number (Kemler No.):** 33 **Classification code:** F1 **Tunnel restriction code:** (D/E)	**Limited quantity (LQ):** 1 L **Excepted Quantities (EQ):** E2 **Classification code:** F1	**Limited quantity (LQ):** 1 L **Excepted Quantities (EQ):** E2 **EmS-No.:** F-E, S-D	**Limited quantity (LQ):** Y341 **Excepted Quantities (EQ):** E2

14.7. Maritime transport in bulk according to IMO instruments

not applicable

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:

Regulation (EC) No 1907/2006 ANNEX XVII
Regulation (EC) No 1272/2008, Annex VIII
Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH: Butanone
Use restriction according to REACH annex XVII, no.: 3

Regulation (EC) 2019/1021 [POP Regulation]: None of the ingredients are included.
Seveso category: P5a FLAMMABLE LIQUIDS, P5b FLAMMABLE LIQUIDS, P5c FLAMMABLE LIQUIDS
Regulation (EC) No. 1005/2009 on substances that lead to the depletion of the ozone layer: None of the ingredients are included.
VOC (Directive 2010/75/EU): 100%
VOC (Directive 2004/42/EG): 100%
Regulation (EC) No. 648/2004 [Detergents regulation]: None of the ingredients are included.

15.1.2. National regulations

[AT] National regulations

Other regulations, restrictions and prohibition regulations

Verordnung über entzündbare Flüssigkeiten, VbF: Entzündbare Flüssigkeiten Kat. 2

15.2. Chemical Safety Assessment

No data available

SECTION 16: Other information

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16.1. Indication of changes

2.2.	Label elements
2.3.	Other hazards
3.2.	Mixtures
4.1.	Description of first aid measures
4.2.	Most important symptoms and effects, both acute and delayed
4.3.	Indication of any immediate medical attention and special treatment needed
5.1.	Extinguishing media
5.2.	Special hazards arising from the substance or mixture
5.4.	Additional information
6.1.	Personal precautions, protective equipment and emergency procedures
6.3.	Methods and material for containment and cleaning up
7.1.	Precautions for safe handling
8.2.	Exposure controls
9.1.	Information on basic physical and chemical properties
10.2.	Chemical stability
10.5.	Incompatible materials
10.6.	Hazardous decomposition products
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008
13.1.	Waste treatment methods
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture
16.1.	Indication of changes
16.2.	Abbreviations and acronyms
16.5.	List of relevant hazard statements and/or precautionary statements from sections 2 to 15

*

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
ASTM	American Society for Testing and Materials
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

EWC	European Waste Catalogue
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
PC	Product category
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation and Authorization of Chemicals
RID	Dangerous goods regulations for transport by rail
SVHC	substances of very high concern
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
flammable liquids *(Flam. Liq. 2)*	H225: Highly flammable liquid and vapour.	On basis of test data.
Serious eye damage/eye irritation *(Eye Irrit. 2)*	H319: Causes serious eye irritation.	Calculation method.
STOT-single exposure *(STOT SE 3)*	H336: May cause drowsiness or dizziness.	Calculation method.

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

Hazard statements	
H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Supplemental hazard information	
EUH066	Repeated exposure may cause skin dryness or cracking.

16.6. Training advice
No data available

16.7. Additional information
To the best of our knowledge, the information contained herein is accurate. However, neither the above-mentioned supplier nor its subsidiaries assume any liability with regard to the correctness or completeness of the information provided. A final determination of the suitability of individual materials is the sole responsibility of the user. All materials may involve unknown risks and should be used with caution. While certain risks are described herein, we cannot guarantee that these are the only possible risks.

* Data changed compared with the previous version.