Ultrasolv 5l

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

1.1. Product identifier

Trade name/designation:

Ultrasolv 5l

Article No.:
T689005

UFI:
HR2A-DXUR-050V-AE57

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

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.	
Serious eye damage/eye irritation *(Eye Irrit. 2)*	H319: Causes serious eye irritation.	
STOT-single exposure *(STOT SE 3)*	H336: May cause drowsiness or dizziness.	

2.2. Label elements

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

Hazard pictograms:

GHS02
Flame

GHS07
Exclamation mark

Signal word: Danger

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.
P233	Keep container tightly closed.

Precautionary statements Response	
P312	Call a POISON CENTER/doctor if you feel unwell.
P337 + P313	If eye irritation persists: Get medical advice/attention.

Precautionary statements Storage	
P403 + P235	Store in a well-ventilated place. Keep cool.

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

2.3. Other hazards
No data available

SECTION 3: Composition/information on ingredients

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3.2. Mixtures
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	

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

SECTION 4: First aid measures

4.1. Description of first aid measures
General information:
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove affected person from the danger area and lay down. Never give anything by mouth to an unconscious person or a person with cramps. If unconscious but breathing normally, place in recovery position and seek medical advice.

Following inhalation:
Remove casualty to fresh air and keep warm and at rest. In case of respiratory tract irritation, consult a physician.

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

After eye contact:
After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Following ingestion:
Do NOT induce vomiting. If swallowed, rinse mouth with water (only if the victim is conscious). Make the victim drink plenty of water in small sips (dilution effect). Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed
Dizziness, Headache, Impairment of vision, Nausea, Vomiting

4.3. Indication of any immediate medical attention and special treatment needed
none

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media:
alcohol resistant foam, Carbon dioxide (CO2), Extinguishing powder, Water spray jet
Unsuitable extinguishing media:
Full water jet

5.2. Special hazards arising from the substance or mixture
Hazardous combustion products:
Carbon monoxide, Carbon dioxide (CO2)

5.3. Advice for firefighters
In case of fire: Wear self-contained breathing apparatus. Protective clothing.

5.4. Additional information
Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Move undamaged containers from immediate hazard area if it can be done safely. Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
6.1.1. For non-emergency personnel
Personal precautions:
Use personal protection equipment.
Remove all sources of ignition.
Wear breathing apparatus if exposed to vapours/dusts/aerosols.
Provide adequate ventilation.

6.1.2. For emergency responders
No data available

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 cleaning up:
Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).
Collect in closed and suitable containers for disposal. Clear contaminated areas thoroughly.

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:

If handled uncovered, arrangements with local exhaust ventilation have to be used. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means. Only use the material in places where open light, fire and other flammable sources can be kept away.

Fire prevent measures:

Keep away from sources of ignition - No smoking.
Usual measures for fire prevention.
Vapours are heavier than air, spread along floors and form explosive mixtures with air.
Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.
Provide earthing of containers, equipment, pumps and ventilation facilities.
Use only antistatically equipped (spark-free) tools.
Wear anti-static footwear and clothing
Take precautionary measures against static discharges.

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

All work processes must always be designed so that the following is excluded:
Inhalation of vapours or spray/mists, Take precautionary measures against static discharge.

7.2. Conditions for safe storage, including any incompatibilities

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

7.3. Specific end use(s)

Recommendation:

No further relevant information available.

SECTION 8: Exposure controls/personal protection

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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
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:

Eye glasses with side protection

Skin protection:

Hand protection:

There is no glove material or combination of materials that gives unlimited resistance to single or combination of chemicals. The breakthrough time must be greater than the end-use time of the product.
The protective glove manufacturer's instructions and information regarding use, storage, maintenance and replacement must be followed. Protective gloves should be changed regularly and when there is evidence of damage to the glove material. Ensure that gloves are free from defects and that they are stored and used correctly. Glove performance or effectiveness can be reduced by physical/chemical damage and poor maintenance. Protective creams can help to protect exposed areas of the skin - these should never be applied after contact.
Suitable material: Butyl caoutchouc (butyl rubber)
Permeation time (maximum wear duration): 120 min
Thickness of the glove material: 0,5mm
Recommended glove articles: EN ISO 374
Check leak tightness/impermeability prior to use. Do not wear gloves near rotary machines and tools. In the case of wanting to use the gloves again, clean them before taking off and air them well.
The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Body protection:

When wearing suitable work clothing, an apron is not required. If no work clothes are worn, then a suitable overall or apron is required.
For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).
Only wear fitting, comfortable and clean protective clothing.
Required properties: antistatic, flame-resistant, heat-resistant
Recommended material: Natural fibres (e.g. cotton), heat-resistant synthetic fibres

Respiratory protection:
If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.
DIN EN 12942:2009-02 Filtering device with filter or ventilator filtering device of type: A

Other protection measures:
Wash hands before breaks and after work. Apply skin care products after work.

8.2.3. Environmental exposure controls
No data available

SECTION 9: Physical and chemical properties

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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	at °C	① Method ② Remark
pH	*No data available*		
Melting point	< -86 °C		
Freezing point	*No data available*		
Initial boiling point and boiling range	78 – 80 °C		
Flash point	-7 °C		① ASTM D 6450
Evaporation rate	*No data available*		
Auto-ignition temperature	*No data available*		
Upper/lower flammability or explosive limits	1 – 11 Vol-%		
Vapour pressure	10.5 kPa	20 °C	
Vapour density	*No data available*		
Density	0.804 – 0.808 g/cm³	20 °C	
Bulk density	*not applicable*		
Water solubility	*No data available*		
Partition coefficient: n-octanol/water	0.3		
Dynamic viscosity	*No data available*		
Kinematic viscosity	*No data available*		
Self ignition temperature	476 °C		

9.2. Other information
No further relevant information 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.

10.3. Possibility of hazardous reactions
none

10.4. Conditions to avoid
No information available.

10.5. Incompatible materials
Alkali (lye), concentrated. Acid, concentrated. Oxidising agent, strong.

10.6. Hazardous decomposition products
Carbon dioxide, Carbon monoxide

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

Serious eye damage/irritation:
Based on available data, the classification criteria are not met.

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

STOT-repeated exposure:
Prolonged or repeated contact with skin or mucous membrane result in irritation symptoms such as redness, blistering, dermatitis, etc. Has degreasing effect on the skin.

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

11.2. Information on other hazards
Endocrine disrupting properties:
No information 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
EC_{50}: 308 mg/L 2 d (crustaceans, Daphnia magna) OECD 202
ErC_{50}: 1,972 mg/L 3 d (Algae/water plant, Pseudokirchnerella subcapitata) OECD 201

Aquatic toxicity:
No further relevant information available.

Assessment/classification:
No further relevant information available.

12.2. Persistence and degradability

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

Abiotic degradation:
No further relevant information available.

Biodegradation:
No further relevant information available.

12.3. Bioaccumulative potential

Partition coefficient: n-octanol/water:
0.3

Accumulation / Evaluation:
No further relevant information available.

12.4. Mobility in soil

No further relevant information 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 further relevant information available.

*
12.7. Other adverse effects

Water hazard class 1: slightly hazardous to water

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of waste according to applicable legislation.

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product

14 06 03 *	other solvents and solvent mixtures

**: Evidence for disposal must be provided.*

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 KETONE	ETHYL METHYL KETONE	ETHYL METHYL KETONE	ETHYL METHYL 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

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
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	**Special Provisions:** - **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:
Use restriction according to REACH annex XVII, no.: 3, 40

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds:
Volatile organic compounds (VOC) content in percent by weight: 806 g/L

15.1.2. National regulations
No data available

15.2. Chemical Safety Assessment
A chemical safety assessment has not been carried out.

SECTION 16: Other information

* **16.1. Indication of changes**

3.2.	Mixtures
8.1.	Control parameters
9.1.	Information on basic physical and chemical properties
12.7.	Other adverse effects
14.3.	Transport hazard class(es)
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture
16.1.	Indication of changes
16.2.	Abbreviations and acronyms

* **16.2. 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%
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
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.	
Serious eye damage/eye irritation *(Eye Irrit. 2)*	H319: Causes serious eye irritation.	
STOT-single exposure *(STOT SE 3)*	H336: May cause drowsiness or dizziness.	

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.