

ULTRASONIC CLEANING SOLUTION

Creation date	01st September 2021	Version	4.0
Revision date			

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

- 1.1. Product identifier** ULTRASONIC CLEANING SOLUTION
Substance / mixture mixture
Number 1 35081 - 1000 L/1 35082 - 5 L/1 35083 - 50 L
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**
Mixture's intended use
Cleaning agent.
The use descriptors
IS Use at industrial sites
PW Widespread use by professional workers
Mixture uses advised against
The product should not be used in ways other than those referred in Section 1.
- 1.3. Details of the supplier of the safety data sheet**
Supplier
Name or trade name RETECH, s.r.o.
Address Vackova 1541/4, Praha 5 - Stodůlky, 155 00
Czech Republic
Identification number (CRN) 25018205
VAT Reg No CZ25018205
Phone +420327596428
E-mail info@retech.cz
Web address www.retech.com
- Competent person responsible for the safety data sheet**
Name RETECH, s.r.o.
E-mail info@retech.cz
- 1.4. Emergency telephone number**
European emergency number: 112

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture**
Classification of the mixture in accordance with Regulation (EC) No 1272/2008
The mixture is not classified as dangerous according to Regulation (EC) No 1272/2008.
Full text of all classifications and hazard statements is given in the section 16.
- 2.2. Label elements**
Supplemental information
<5 % cationic surfactants
none
- 2.3. Other hazards**
The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

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SECTION 3: Composition/information on ingredients**3.2. Mixtures****Chemical characterization**

Mixture of substances and additives specified below.

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
CAS: 112-27-6 EC: 203-953-2	2,2'-(ethylenedioxy)diethanol	5-10	not classified as dangerous	
Index: 603-002-00-5 CAS: 64-17-5 EC: 200-578-6 Registration number: 01-2119457610-43	ethanol	0,552	Flam. Liq. 2, H225 Eye Irrit. 2, H319 Specific concentration limit: Eye Irrit. 2, H319: C ≥ 50 %	
Index: 612-131-00-6 CAS: 7173-51-5 EC: 230-525-2	didecyldimethylammonium chloride	0,4-0,48	Acute Tox. 4, H302 Skin Corr. 1B, H314	
Index: 603-117-00-0 CAS: 67-63-0 EC: 200-661-7 Registration number: 01-2119457558-25	propan-2-ol	0,172- 0,224	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	
Index: 606-002-00-3 CAS: 78-93-3 EC: 201-159-0	butanone	0,012- 0,024	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	1

Notes

1 Substance with a Union workplace exposure limit.

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures**4.1. Description of first aid measures**

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet.

If inhaled

Terminate the exposure immediately; move the affected person to fresh air.

If on skin

Remove contaminated clothes.

If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person.

If swallowed

DO NOT INDUCE VOMITING - even the induced vomiting can cause complications as in case of detergents and other foaming substances.

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

Not expected.

If on skin

Not expected.

If in eyes

Not expected.

If swallowed

Not expected.

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

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Accommodate extinguishing components to the location of fire.

Unsuitable extinguishing media

not available

5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

5.3. Advice for firefighters

Use a self-contained breathing apparatus and full-body protective clothing. Self-Contained Breathing Apparatus (SCBA) with chemical resistant gloves.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Follow the instructions in the Sections 7 and 8.

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water.

6.3. Methods and material for containment and cleaning up

After removal of the product, wash the contaminated site with plenty of water.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Prevent formation of gases and vapours in concentrations exceeding the occupational exposure limits. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose.

Content	Packaging type	Material of package
5 l	jerry can	HDPE
50 l	jerry can	HDPE
1000 l	barrel / drum	HDPE

Storage temperature

min 5 °C, max 40 °C

7.3. Specific end use(s)

not available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

European Union

Commission Directive 2000/39/EC

Substance name (component)	Type	Value
butanone (CAS: 78-93-3)	OEL 8 hours	600 mg/m ³
	OEL 8 hours	200 ppm
	OEL 15 minutes	900 mg/m ³
	OEL 15 minutes	300 ppm

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8.2. Exposure controls

Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection

It is not needed.

Skin protection

When handling in long-term or repeatedly, use protective gloves.

Respiratory protection

Halfmask with a filter against organic vapours or a self-contained breathing apparatus as appropriate if exposure limit values of substances are exceeded or in a poorly ventilated environment.

Thermal hazard

Not available.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state	liquid
Colour	colourless
Odour	according to fragrance
Melting point/freezing point	data not available
Boiling point or initial boiling point and boiling range	280 °C
Flammability	data not available
Lower and upper explosion limit	data not available
Flash point	355 °C
Auto-ignition temperature	data not available
Decomposition temperature	data not available
pH	7-8,5 (undiluted)
Kinematic viscosity	17-18,5 mm ² /s at 20 °C
Solubility in water	soluble
Solubility in fats	data not available
Partition coefficient n-octanol/water (log value)	data not available
Vapour pressure	data not available
Density and/or relative density	
Density	0,935-1,03 g/cm ³ at 20 °C
Form	liquid
data not available	

9.2. Other information

Evaporation rate	data not available
Explosive properties	The product does not have explosive properties.

SECTION 10: Stability and reactivity**10.1. Reactivity**

not available

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

Unknown.

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10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

SECTION 11: Toxicological information

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

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time. No toxicological data is available for the mixture.

Acute toxicity

Based on available data the classification criteria are not met.

2,2'-(ethylenedioxy)diethanol

Route of exposure	Parameter	Method	Value	Time of exposure	Species	Sex
Oral	LD ₅₀		>2000 mg/kg		Rat	F/M
Dermal	LD ₅₀		18016 mg/kg		Rabbit	
Inhalation (dust/mist)	LC ₅₀		>5.2 mg/l	4 hour	Rat	F/M

ethanol

Route of exposure	Parameter	Method	Value	Time of exposure	Species	Sex
Inhalation (vapor)	LC ₅₀		124.7 mg/l	4 hour	Rat	
Inhalation (vapor)	LC ₅₀		116.9 mg/l	4 hour	Rat	
Inhalation (vapor)	LC ₅₀		133.8 mg/l	4 hour	Rat	

propan-2-ol

Route of exposure	Parameter	Method	Value	Time of exposure	Species	Sex
Inhalation (vapor)	LC ₅₀	OECD 403	>10000 ppm	6 hour	Rat	F/M

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Route of exposure	Parameter	Method	Value	Time of exposure	Species	Sex
Oral	LD ₅₀				Rat (Rattus norvegicus)	
Dermal	LD ₅₀				Rabbit	
Inhalation	LC ₅₀				Rat (Rattus norvegicus)	

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.

ethanol

Route of exposure	Result	Method	Time of exposure	Species
	Irritating			Rabbit

propan-2-ol

Route of exposure	Result	Method	Time of exposure	Species
Eye	Serious eye damage	OECD 405		Rabbit

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Respiratory or skin sensitisation

Based on available data the classification criteria are not met.

propan-2-ol

Route of exposure	Result	Time of exposure	Species	Sex
	Not sensitizing		Guinea-pig	F/M

Mutagenicity

propan-2-ol

Result	Time of exposure	Specific target organ	Species	Sex
Negative without metabolic activation, Negative with metabolic activation		Ovary	Guinea-pig	F/M

Germ cell mutagenicity

Based on available data the classification criteria are not met.

Carcinogenicity

Based on available data the classification criteria are not met.

ethanol

Route of exposure	Parameter	Value	Result	Species	Sex
Oral			Indeterminate	Rat	

Reproductive toxicity

Based on available data the classification criteria are not met.

ethanol

Effect	Parameter	Value	Result	Species	Sex
Effects on fertility	NOAEL	>16000 ppm	No effect	Rat	
	NOAEL	5200 mg/kg/24hour	Indeterminate	Rat	

Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

ethanol

Route of exposure	Parameter	Value	Time of exposure	Specific target organ	Result	Species	Sex
Inhalation	LOAEL	2.6 mg/l	30 min	Nervous system	Drowsiness, Dizziness	Human	
Inhalation	LOAEL	9.4 mg/l		Lungs	Indeterminate	Human	

Toxicity for specific target organ - repeated exposure

Based on available data the classification criteria are not met.

propan-2-ol

Route of exposure	Parameter	Value	Result	Species	Sex
Inhalation (vapor)	NOEC	500 ppm		Rat (Rattus norvegicus)	F/M

Aspiration hazard

Based on available data the classification criteria are not met.

11.2. Information on other hazards

not available

SECTION 12: Ecological information

12.1. Toxicity

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Acute toxicity

2,2'-(ethylenedioxy)diethanol

Parameter	Method	Value	Time of exposure	Species	Environment	Determining method
LC ₅₀		>10000 mg/kg	96 hour	Fishes (Lepomis macrochirus)		
LC ₅₀	OECD 203	69800 mg/l	96 hour	Fishes (Oncorhynchus mykiss)		
EC ₅₀		>10000 mg/kg	48 hour	Invertebrates (Daphnia magna)		

ethanol

Parameter	Method	Value	Time of exposure	Species	Environment	Determining method
EC ₀		3.9 g/l	200 hour	Fishes		Experimentally
EC ₅₀		>10000 g/l	48 hour	Daphnia		Experimentally
IC ₅₀		8800 mg/l	96 hour	Algae		Experimentally

propan-2-ol

Parameter	Method	Value	Time of exposure	Species	Environment	Determining method
EC ₅₀		>10000 mg/l	48 hour	Daphnia (Daphnia magna)		
LC ₅₀		9640 mg/l	96 hour	Fishes	Freshwater	

Chronic toxicity

2,2'-(ethylenedioxy)diethanol

Parameter	Value	Time of exposure	Species	Environment	Determining method
NOAEC	>15000 mg/kg	21 day	Daphnia (Daphnia magna)		

ethanol

Parameter	Value	Time of exposure	Species	Environment	Determining method
LC ₅₀	9248 mg/l	48 hour	Invertebrates		Experimentally
NOEC	250 mg/l	120 hour	Fishes (Oncorhynchus mykiss)		Experimentally
NOEC	1000 mg/l	120 hour	Fishes		Experimentally

12.2. Persistence and degradability

Biodegradability

2,2'-(ethylenedioxy)diethanol

Parameter	Method	Value	Time of exposure	Environment	Result
	OECD 301A	90-100 %	10 day		

The mixture is biodegradable.

12.3. Bioaccumulative potential

Not available.

12.4. Mobility in soil

Not available.

12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Endocrine disrupting properties

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

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Not available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

Waste type code

07 06 00 wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics

07 06 01 aqueous washing liquids and mother liquors *

Packaging waste type code

15 01 02 plastic packaging

(*) - Hazardous waste according to Directive 2008/98/EC on hazardous waste

SECTION 14: Transport information**14.1. UN number or ID number**

not subject to transport regulations

14.2. UN proper shipping name

not relevant

14.3. Transport hazard class(es)

not relevant

14.4. Packing group

not relevant

14.5. Environmental hazards

not relevant

14.6. Special precautions for user

Reference in the Sections 4 to 8.

14.7. Maritime transport in bulk according to IMO instruments

not relevant

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended. REGULATION (EC) No 648/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 March 2004 on detergents, as amended.

15.2. Chemical safety assessment

not available

SECTION 16: Other information**A list of standard risk phrases used in the safety data sheet**

H225

Highly flammable liquid and vapour.

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H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

A list of additional standard phrases used in the safety data sheet

EUH066 Repeated exposure may cause skin dryness or cracking.

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR European agreement concerning the international carriage of dangerous goods by road
BCF Bioconcentration Factor
CAS Chemical Abstracts Service
CLP Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
EC₅₀ Concentration of a substance when it is affected 50% of the population
EINECS European Inventory of Existing Commercial Chemical Substances
EmS Emergency plan
ES Identification code for each substance listed in EINECS
EU European Union
EuPCS European Product Categorisation System
IATA International Air Transport Association
IBC International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
IC₅₀ Concentration causing 50% blockade
ICAO International Civil Aviation Organization
IMDG International Maritime Dangerous Goods
INCI International Nomenclature of Cosmetic Ingredients
ISO International Organization for Standardization
IUPAC International Union of Pure and Applied Chemistry
LC₅₀ Lethal concentration of a substance in which it can be expected death of 50% of the population
LD₅₀ Lethal dose of a substance in which it can be expected death of 50% of the population
LOAEL Lowest observed adverse effect level
log K_{ow} Octanol-water partition coefficient
MARPOL International Convention for the Prevention of Pollution from Ships
NOAEC No observed adverse effect concentration
NOAEL No observed adverse effect level
NOEC No observed effect concentration
OEL Occupational Exposure Limits
PBT Persistent, Bioaccumulative and Toxic
ppm Parts per million
REACH Registration, Evaluation, Authorisation and Restriction of Chemicals
RID Agreement on the transport of dangerous goods by rail
UN Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB Substances of unknown or variable composition, complex reaction products or biological materials
VOC Volatile organic compounds
vPvB Very Persistent and very Bioaccumulative

Acute Tox. Acute toxicity
Eye Irrit. Eye irritation
Flam. Liq. Flammable liquid

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Skin Corr.

Skin corrosion

STOT SE

Specific target organ toxicity - single exposure

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended.
REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

The changes (which information has been added, deleted or modified)

The version 4.0 replaces the SDS version from 22 June 2021. Changes were made in sections 2, 3, 7, 8, 11, 12, 13 and 16.

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.