

according to Regulation (EC) No 1907/2006 (REACH) as amended

GLASS CLEAN

Creation date 15th September 2022

Revision date Version 4.0

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

L.1. Product identifier GLASS CLEAN
Substance / mixture mixture

Number R 34698

UFI 4033-Q3XP-S00G-4MV0

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

Mixture's intended use

Cleaning agent.

Mixture uses advised against

For professional use only.

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)25018205VAT Reg NoCZ25018205Phone+420327596428E-mailinfo@retech.czWeb addresswww.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 classified as dangerous.

Aerosol 1, H222, H229

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

Most serious adverse physico-chemical effects

Extremely flammable aerosol. Pressurised container: May burst if heated.

2.2. Label elements

Hazard pictogram



Signal word

Danger

Hazard statements

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.



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P410+P412

Protect from sunlight. Do no expose to temperatures exceeding 50 °C.

2.3. Other hazards

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.

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: 106-97-8 EC: 203-448-7 Registration number: 01-2119474691-32	butane (containing < 0,1 % butadiene (203 -450-8))	2,5-<10,0	Flam. Gas 1, H220 Press. Gas (compressed gas), H280	
CAS: 111-76-2 Registration number: 01-2119475108-36	2-butoxyethanol	2,5-<10,0	Acute Tox. 4, H302, H312, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319	1
CAS: 74-98-6 EC: 200-827-9 Registration number: 01-2119486944-21	propane	2,5-<10,0	Flam. Gas 1, H220 Press. Gas (compressed gas), H280	
CAS: 67-63-0 EC: 200-661-7 Registration number: 01-2119457558-25	propan-2-ol	1,0-<2,5	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	
CAS: 1336-21-6 EC: 215-647-6 Registration number: 01-2119488876-14	ammonia	0,25-<1,0	Skin Corr. 1B, H314 Aquatic Acute 1, H400 Specific concentration limit: STOT SE 3, H335: $C \ge 5$ %	

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

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. In the event of issues, find medical advice.

If on skin

Generally the product does not irritate the skin.

If in eves

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! Provide medical treatment.



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

If inhaled

not available

If on skin

not available

If in eyes

not available

If swallowed

not available

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

not available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media

Water - full jet.

5.2. Special hazards arising from the substance or mixture

not available

5.3. Advice for firefighters

Use a self-contained breathing apparatus and full-body protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide sufficient ventilation. Use personal protective equipment for work. Keep unprotected persons away.

6.2. Environmental precautions

Do not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system.

6.3. Methods and material for containment and cleaning up

Provide sufficient ventilation. Do not flush with water or aqueous cleansing agents.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care. Do not spray on an open flame or other ignition source. The product should be used only in the areas where it is not in contact with open fire and other ignition sources. No smoking. Take precautionary measures against static discharge. Pressurised container: May burst if heated. Keep away from sources of heating, ignition and direct sunlight. Do not pierce or burn, even after use

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. Protect from sunlight. Do not expose to temperatures exceeding 50 °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)	Туре	Value	Note
2-butoxyethanol (CAS: 111-76-2)	OEL 8 hours	98 mg/m ³	Skin



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European Union

Commission Directive 2000/39/EC

Substance name (component)	Туре	Value	Note
	OEL 8 hours	20 ppm	
2-butoxyethanol (CAS: 111-76-2)	OEL 15 minutes	246 mg/m ³	Skin
	OEL 15 minutes	50 ppm	

DNEL

propan-2-ol

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Consumers	Oral	26 mg/kg bw/day	Systemic chronic effects		
Consumers	Dermal	319 mg/kg bw/day	Systemic chronic effects		
Workers	Dermal	888 mg/kg bw/day	Systemic chronic effects		
Consumers	Inhalation	89 mg/m ³	Systemic chronic effects		
Workers	Inhalation	500 mg/m ³	Systemic chronic effects		

8.2. Exposure controls

Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection

Tightly sealed goggles.

Skin protection

Hand protection: Protective gloves resistant to the product. Material of gloves: Nitrile rubber, NBR. Recommended thickness of the material: ≥ 0.5 mm. Penetration time of glove material: > 480 min. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Other protection: protective workwear.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Filter ABEK/P2.

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 gas
Colour colourless
Odour fruit-like
Melting point/freezing point data not available

Boiling point or initial boiling point and boiling range -44,5 °C

Flammability Extremely flammable aerosol.

Lower and upper explosion limit

bottom 1,1 % upper 12,0 % Flash point -97 $^{\circ}$ C

Auto-ignition temperature data not available
Decomposition temperature data not available
pH non-polar/aprotic
Kinematic viscosity data not available

Viscosity 7500-10500 Brookfield sp3 6 rpm; 4000-6000 Brookfield

sp3 12 rpm



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Solubility in water almost insoluble Solubility in fats data not available Partition coefficient n-octanol/water (log value) data not available 4000 hPa at 20 °C Vapour pressure

Density and/or relative density 0,938 g/cm3 at 20 °C Density

Form aerosol dispenser: spray aerosol

data not available 9.2. Other information

> Evaporation rate data not available 365 °C Ignition temperature

The product does not have explosive properties but can be Explosive properties

explosive when blended with air.

Content of organic solvents (VOC) 15.5 % Solid content (dry matter) 0,0 % volume Max. VOC content in the product in its ready to use 145,6 g/l

condition Water: 83,5 %

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

10.4. Conditions to avoid

not available

10.5. Incompatible materials

not available

10.6. Hazardous decomposition products

Unknown.

SECTION 11: Toxicological information

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

No toxicological data is available for the mixture.

Acute toxicity

Based on available data the classification criteria are not met.

2-butoxyethanol

Route of exposure	Parameter	Value	Exposure time	Species	Sex
Oral	LD50	300 mg/kg		Rabbit	
Oral	LD50	470 mg/kg		Rat	
Dermal	LD50	2000 mg/kg		Rabbit	

propan-2-ol

Route of exposure	Parameter	Value	Exposure time	Species	Sex
Oral	LD50	5840 mg/kg		Rat	
Dermal	LD ₅₀	13900 mg/kg		Rabbit	
Inhalation	LC ₅ 0	>25 mg/l	4 hour	Rat	

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.



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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.

Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

Toxicity for specific target organ - repeated exposure

Based on available data the classification criteria are not met.

Aspiration hazard

Based on available data the classification criteria are not met.

11.2. Information on 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.

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity

2-butoxyethanol

Parameter	Value	Exposure time	Species	Environment
LC50	1490 mg/l		Fishes (Lepomis macrochirus)	

propan-2-ol

Parameter	Value	Exposure time	Species	Environment
LC50	9714 mg/l	24 hour	Invertebrates (Daphnia magna)	
LC50	9640 mg/l	96 hour	Fishes (Pimephales promelas)	

Chronic toxicity

propan-2-ol

Parameter	Value	Exposure time	Species	Environment
LOEC	1000 mg/l	8 day	Algae	

12.2. Persistence and degradability

Data not available.

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

Additional ecological information:

General notes: Water hazard class 1 (german Regulation, self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.



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SECTION 13: Disposal considerations

13.1. Waste treatment methods

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.

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

16 03 05 organic wastes containing hazardous substances *

Packaging waste type code

15 01 11 metallic packaging containing a hazardous solid porous matrix (for example asbestos), including empty pressure containers *

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

SECTION 14: Transport information

14.1. UN number or ID number

UN 1950

14.2. UN proper shipping name

AEROSOLS

14.3. Transport hazard class(es)

2 Gases

14.4. Packing group

not relevant

14.5. Environmental hazards

No

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

Additional information

Segregation groups: Alkalis. Stowage Code: SW1 Protected from sources of heat. SW2 Clear of living quarters. Segregation Code: SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.

Hazard identification No.

UN number Classification code Safety signs 1950

5F 2.1



Road transport - ADR

Limited quantities 1L
Excepted quantities E0
Tunnel restriction code (D)

Railway transport - RID

Marine transport - IMDG

EmS (emergency plan) F-D, S-U



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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 ammended.

Additional information in accordance with Regulation (EC) no. 648/2004 on detergents, as amended

5-<15 % aliphatic hydrocarbons, perfumes, Limonene

15.2. Chemical safety assessment

not available

SECTION 16: Other information

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

11220	extremely naminable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.

H280 Contains gas under pressure; may explode if heated.

H302 Harmful if swallowed.
H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation. H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

Guidelines for safe handling used in the safety data sheet

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P410+P412 Protect from sunlight. Do no expose to temperatures exceeding 50 °C.

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

DNEL Derived no-effect level

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



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IBC International Code For The Construction And Equipment of Ships Carrying

Dangerous Chemicals

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

log Kow Octanol-water partition coefficient

MARPOL International Convention for the Prevention of Pollution from Ships

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
Aerosol Aerosol

Aquatic Acute Hazardous to the aquatic environment

Eye Irrit. Eye irritation
Flam. Gas Flammable gas
Flam. Liq. Flammable liquid
Press. Gas Gases under pressure

Skin Corr. Skin corrosion
Skin Irrit. Skin irritation

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 03 June 2020. Changes were made in sections 11, 12, 13, 15 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.