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

1.1 Product identifier

828 Grund Reiniger Flüssig

Registration number	01-2119457558-25-XXXX
IUPAC	Propan-2-ol
EU-INDEX	603-117-00-0
EINECS/ELINCS	200-661-7
CAS	67-63-0

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

1.2.1 Relevant uses

Cleaning agent

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company

Ramsauer GmbH & Co KG
Sarstein 17
4822 Bad Goisern / H. / AUSTRIA
Phone +43(0)6135 8205-0
Fax +43(0)6135 8323
Homepage www.ramsauer.at
E-mail office@ramsauer.at

Address enquiries to

Technical information	office@ramsauer.at
Safety Data Sheet	sdb@chemiebuero.de

1.4 Emergency telephone number

Advisory body +43 (0) 1 406 43 43 (24h)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (EC) No 1272/2008]

Flam. Liq. 2: H225 Highly flammable liquid and vapour.
Eye Irrit. 2: H319 Causes serious eye irritation.
STOT SE 3: H336 May cause drowsiness or dizziness.

2.2 Label elements

The product is required to be labelled in accordance with regulation (EC) No 1272/2008 (CLP).

Hazard pictograms


Signal word	DANGER
Contains:	Propan-2-ol EU-INDEX 603-117-00-0
Hazard statements	H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.
Precautionary statements	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 Keep container tightly closed. P261 Avoid breathing vapours. P271 Use only outdoors or in a well-ventilated area. P280 Wear eye protection / face protection. P337+P313 If eye irritation persists: Get medical advice / attention.

2.3 Other hazards

Environmental hazards Does not contain any PBT or vPvB substances.

Other hazards Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

3.1 Substances

The product is a substance.

Range [%]	Substance
100	Propan-2-ol
	CAS: 67-63-0, EINECS/ELINCS: 200-661-7, EU-INDEX: 603-117-00-0, Reg-No.: 01-2119457558-25-XXXX
	GHS/CLP: Flam. Liq. 2: H225 - Eye Irrit. 2: H319 - STOT SE 3: H336

Comment on component parts Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
For full text of H-statements: see SECTION 16.

3.2 Mixtures

not applicable

SECTION 4: First aid measures

4.1 Description of first aid measures

General information Take off contaminated clothing and wash before reuse.

Inhalation Ensure supply of fresh air.
In the event of symptoms seek medical treatment.

Skin contact In case of contact with skin wash off immediately with soap and water.
Consult a doctor if skin irritation persists.

Eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

Ingestion Seek medical advice immediately.
Rinse out mouth and give plenty of water to drink.
Do not induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Irritant effects
Drowsiness
Vertigo
Nausea, vomiting.

4.3 Indication of any immediate medical attention and special treatment needed

If swallowed or in the event of vomiting, risk of product entering the lungs.
Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media Carbon dioxide.
Water spray jet.
Dry powder.
Alcohol-resistant foam.

Extinguishing media that must not be used Full water jet

5.2 Special hazards arising from the substance or mixture

In the event of fire the following can be released:
Carbon monoxide (CO)

5.3 Advice for firefighters

Use self-contained breathing apparatus.

Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.
Cool containers at risk with water spray jet.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep away from all sources of ignition.
Ensure adequate ventilation.
Use personal protective equipment.

6.2 Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers).
Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Take up with absorbent material (e.g. sand).
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provide suitable vacuuming at the processing machines.
Use solvent-resistant equipment.

Keep away from all sources of ignition - Refrain from smoking.
Ignitable mixtures can be formed in the empty container.
Take precautionary measures against static discharges.
Vapours can form an explosive mixture with air.
Apparates and equipments must be conform in accordance to standard of storage and handling of flammable products.

Do not eat, drink, smoke or take drugs at work.
Wash hands before breaks and after work.
Use barrier skin cream.
Take off contaminated clothing and wash before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.
Provide solvent-resistant and impermeable floor.
Prevent penetration into the ground.
Provide floor with bunding.

Do not store together with oxidizing agents.

Protect from heat/overheating.
Keep container in a well-ventilated place.
Keep container tightly closed.
Recommended storage temperature: 5 - 30 °C

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

Substance
Propan-2-ol
CAS: 67-63-0, EINECS/ELINCS: 200-661-7, EU-INDEX: 603-117-00-0, Reg-No.: 01-2119457558-25-XXXX
Long-term exposure: 400 ppm, 999 mg/m³
Short-term exposure (15-minute): 500 ppm, 1250 mg/m³

DNEL

Substance
Propan-2-ol, CAS: 67-63-0
Industrial, dermal, Long-term - systemic effects: 888 mg/kg bw/day.
Industrial, inhalative, Long-term - systemic effects: 500 mg/m³.
general population, oral, Long-term - systemic effects: 26 mg/kg bw/day.
general population, inhalative, Long-term - systemic effects: 89 mg/m³.
general population, dermal, Long-term - systemic effects: 319 mg/kg bw/day.

PNEC

Substance
Propan-2-ol, CAS: 67-63-0
sewage treatment plants (STP), 2,251 g/L.
soil, 28 mg/kg soil dw.
sediment (seawater), 552 mg/kg sediment dw.
sediment (freshwater), 552 mg/kg sediment dw.
seawater, 140,9 mg/L.
freshwater, 140,9 mg/L.

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.
Eye protection	Safety glasses. (EN 166:2001)
Hand protection	The details concerned are recommendations. Please contact the glove supplier for further information. 0,7 mm Butyl rubber, >480 min (EN 374-1/-2/-3).
Skin protection	Solvent-resistant protective clothing (EN 340)
Other	Do not inhale vapours. Avoid contact with eyes and skin. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.
Respiratory protection	In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection. Short term: filter apparatus, filter A. (DIN EN 14387)
Thermal hazards	not applicable
Delimitation and monitoring of the environmental exposition	Protect the environment by applying appropriate control measures to prevent or limit emissions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	liquid
Color	colourless
Odor	alcoholic
Odour threshold	not determined
pH-value	neutral
pH-value [1%]	neutral
Boiling point [°C]	82
Flash point [°C]	12
Flammability (solid, gas) [°C]	not determined
Lower explosion limit	2 Vol.-%
Upper explosion limit	12 Vol.-%
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	4,2 (20°C)
Density [g/ml]	0,785 (20 °C / 68,0 °F)
Bulk density [kg/m³]	not applicable
Solubility in water	completely miscible
Partition coefficient [n-octanol/water]	log Kow = 0,05 (OECD 107)
Viscosity	ca. 2,5 mPas (20°C)
Relative vapour density determined in air	2
Evaporation speed	not determined
Melting point [°C]	-89,5
Autoignition temperature [°C]	425 (DIN 51794)
Decomposition temperature [°C]	not applicable

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

See SECTION 10.3.

10.2 Chemical stability

The product is stable under standard conditions.

10.3 Possibility of hazardous reactions

Reactions with strong acids.
Evolution of flammable mixtures possible in air when heated above flash point and/or during spraying or misting.
Reactions with strong oxidizing agents.

10.4 Conditions to avoid

See SECTION 7.2.
Strong heating.

10.5 Incompatible materials

not determined

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Substance
Propan-2-ol, CAS: 67-63-0
LD50, dermal, Rabbit: 16,4 mL/kg bw.
LD50, oral, Rat: 5840 mg/kg bw.
LC50, inhalative, Rat: 10000 ppm (4h).
NOAEC, inhalative, Rat: 5000 ppm.

Serious eye damage/irritation	Irritant (rabbit).
Skin corrosion/irritation	Non-irritant (rabbit).
Respiratory or skin sensitisation	Non-sensitizing.
Specific target organ toxicity — single exposure	Vapours may cause drowsiness and dizziness.
Specific target organ toxicity — repeated exposure	The substance or mixture is not classified as specific target organ toxicant, repeated
Mutagenicity	There is no evidence of any mutagenic effects.
Reproduction toxicity	There is no evidence of any reproductive toxicity effects.
Carcinogenicity	There is no evidence of any carcinogenic effects.
Aspiration hazard	Based on available data, the classification criteria are not met.
General remarks	Has a degreasing effect on the skin.
	The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

SECTION 12: Ecological information

12.1 Toxicity

Substance
Propan-2-ol, CAS: 67-63-0
LC50, (96h), Pimephales promelas: 9,64 g/L.
EC50, (48h), Daphnia magna: 10 g/L.
NOEC, (72h), Algae: 1,8 g/L.
NOEC, (72h), Algae: 9,17 g/L.

12.2 Persistence and degradability

Behaviour in environment compartments	
Behaviour in sewage plant	not determined
Biological degradability	The product is readily biodegradable. 53% (Expositionsdauer: 5 d)

12.3 Bioaccumulative potential

Accumulation in organisms is not expected.
log Pow <4

12.4 Mobility in soil

The product is mobile in an aqueous environment.

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Other adverse effects

Do not discharge product unmonitored into the environment.
The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Disposal in an incineration plant in accordance with the regulations of the local authorities.
Dispose of as hazardous waste.

Waste no. (recommended) 070704*

Contaminated packaging

Packaging that cannot be cleaned should be disposed of as for product.
Uncontaminated packaging may be taken for recycling.

Waste no. (recommended) 150110* packaging containing residues of or contaminated by hazardous substances
150104

SECTION 14: Transport information

14.1 UN number

Transport by land according to ADR/RID	1219
Inland navigation (ADN)	1219
Marine transport in accordance with IMDG	1219
Air transport in accordance with IATA	1219

14.2 UN proper shipping name

Transport by land according to ADR/RID	Isopropanol
- Classification Code	F1
- Label	
- ADR LQ	1 l
- ADR 1.1.3.6 (8.6)	Transport category (tunnel restriction code) 2 (D/E)
Inland navigation (ADN)	Isopropanol
- Classification Code	F1
- Label	
Marine transport in accordance with IMDG	Isopropanol
- EMS	F-E, S-D
- Label	
- IMDG LQ	1 l
Air transport in accordance with IATA	Isopropanol
- Label	

14.3 Transport hazard class(es)

Transport by land according to ADR/RID	3
Inland navigation (ADN)	3
Marine transport in accordance with IMDG	3
Air transport in accordance with IATA	3

14.4 Packing group

Transport by land according to ADR/RID	II
Inland navigation (ADN)	II
Marine transport in accordance with IMDG	II
Air transport in accordance with IATA	II

14.5 Environmental hazards

Transport by land according to ADR/RID	no
Inland navigation (ADN)	no
Marine transport in accordance with IMDG	no
Air transport in accordance with IATA	no

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

not determined

SECTION 15: Regulatory information

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

EEC-REGULATIONS	2008/98/EC 2000/532/EC); 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2015/830; (EU) 2016/131; (EU) 517/2014
TRANSPORT-REGULATIONS	ADR (2019); IMDG-Code (2019, 39. Amdt.); IATA-DGR (2020)
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011).
- Observe employment restrictions for people	Observe employment restrictions for young people.
- VOC (2010/75/CE)	100 %

15.2 Chemical safety assessment

For this substance a chemical safety assessment has been carried out.

SECTION 16: Other information

16.1 Hazard statements (SECTION 3)

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

16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ATE = acute toxicity estimate
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
EL50 = Median effective loading
ELINCS = European List of Notified Chemical Substances
EmS = Emergency Schedules
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform ChemicaL Information Database
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
LC0 = lethal concentration, 0%
LOAEL = lowest-observed-adverse-effect level
LL50 = Median lethal loading
LQ = Limited Quantities
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
STP = Sewage Treatment Plant
TLV®/TWA = Threshold limit value – time-weighted average
TLV®STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

16.3 Other information

Classification procedure

Flam. Liq. 2: H225 Highly flammable liquid and vapour. (Harmonised Classification)
Eye Irrit. 2: H319 Causes serious eye irritation. (Harmonised Classification)
STOT SE 3: H336 May cause drowsiness or dizziness. (Harmonised Classification)

Modified position

SECTION 2 been added: Further hazards were not determined with the current level of knowledge.

SECTION 4 been added: Vertigo

SECTION 4 been added: Drowsiness

SECTION 8 been added: In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection.