

Freezer

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

1.1 - Product identifier

Trade name/designation: Freezer
Chemical name:
Product-type: Mixture
Product code: 762.400.000
UFI: Y410-R0RG-J00U-ESU2

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

1.3 - Details of the supplier of the safety data sheet

ECS Cleaning Solutions GmbH
Wolfener Str. 32-34
D-12681 Berlin Germany
Telephone : +49 (0)30 / 36 46 40 36
gunnar.kleinmann@ecsag.com

1.4 - Emergency telephone number

Germany: Intoxications Information Center; +49 761 19240
Switzerland: Swiss Toxicological Information Centre; +41 44 251 51 51
Austria: Intoxication information center; +43 1 406 43 43

SECTION 2: Hazards identification

2.1 - Classification of the substance or mixture

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

Aerosol 1	Aerosol - Category 1
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2.2 - Label elements

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

Contains: propane (CAS No.: 74-98-6) | butane (CAS No.: 106-97-8)

Signal word : Danger

Hazard pictograms



Hazard statements

H222	Extremely flammable aerosol
H229	Pressurised container: May burst if heated

Precautionary statements

P102	Keep out of reach of children.
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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 not expose to temperatures exceeding 50 °C/122 °F.
EUH-phrases	: None

2.3 - Other hazards

PBT-substance. - This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

vPvB-substance. - This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

Other hazards which do not result in classification - Refrigerated liquefied gas. Contact with the product can cause cold burns or frostbite.
- Even after use and until complete evaporation of the flammable components, there is still a danger of an explosive steam-air mixture forming.

SECTION 3: Composition / information on ingredients

3.1 - Substances

Not applicable

3.2 - Mixtures

Chemical name	No	%	Class(es)	Specific concentration limit
butane	CAS No. : 106-97-8 Index No. : 601-004-00-0 EC No. : 203-448-7	65	Flam. Gas 1 - H220 Press. Gas	Not applicable
propane	CAS No. : 74-98-6 Index No. : 601-003-00-5 EC No. : 200-827-9	30	Flam. Gas 1 - H220 Press. Gas	Not applicable

SECTION 4: First aid measures

4.1 - Description of first aid measures

Following inhalation - Provide fresh air.
- When in doubt or if symptoms are observed, get medical advice.

Following skin contact - Remove contaminated, saturated clothing immediately.
- When in doubt or if symptoms are observed, get medical advice.

After eye contact - Rinse immediately carefully and thoroughly with eye-bath or water.
- In case of eye irritation consult an ophthalmologist.

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

Symptoms and effects - Following inhalation - No information available.

Symptoms and effects - Following skin contact - No information available.

Symptoms and effects - After eye contact - No information available.

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

- Treat symptomatically.
- Refrigerated liquefied gas. Contact with the product can cause cold burns or frostbite.

SECTION 5: Firefighting measures

5.1 - Extinguishing media

Suitable extinguishing media

- ABC-powder
- Carbon dioxide (CO₂)
- Foam
- Extinguishing powder

Unsuitable extinguishing media

- Full water jet

5.2 - Special hazards arising from the substance or mixture

Special hazards arising from the substance or mixture

- Vapours can form explosive mixtures with air.

Hazardous decomposition products

- No information available.

5.3 - Advice for firefighters

- Wear a self-contained breathing apparatus and chemical protective clothing.
- Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1 - Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

- Provide adequate ventilation.
- Remove all sources of ignition.

For emergency responders

- No information available.

6.2 - Environmental precautions

- Do not allow uncontrolled discharge of product into the environment.

6.3 - Methods and material for containment and cleaning up

Methods and material for containment

- Soak up inert absorbent and dispose as waste requiring special attention.

Methods and material for cleaning up

- Ventilate affected area.

Inappropriate techniques

- No information available.

6.4 - Reference to other sections

- Disposal: see section 13
- Personal protection equipment: see section 8
- Safe handling: see section 7

SECTION 7: Handling and storage

7.1 - Precautions for safe handling

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Recommendation

- Do not pierce or burn, even after use.
- Do not spray on naked flames or any incandescent material.
- Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
- Keep away from sources of ignition - No smoking.
- Take precautionary measures against static discharges.
- Vapours can form explosive mixtures with air.
- Heating causes rise in pressure with risk of bursting.

7.2 - Conditions for safe storage, including any incompatibilities

- Keep container tightly closed in a cool, well-ventilated place.
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Do not store together with: Oxidising agent
- Pyrophoric or self-heating substances

7.3 - Specific end use(s)

- Aerosols

SECTION 8: Exposure controls/personal protection

8.1 - Control parameters

butane (106-97-8)

IOELV TWA mg/m3 (UE)	1450 mg/m3
IOELV TWA ppm (UE)	600 ppm

8.2 - Exposure controls

Appropriate engineering controls

- Take off contaminated clothing and wash it before reuse.
- Wash hands before breaks and after work.
- When using do not eat or drink.

Individual protection measures, such as personal protective equipment

- When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.
- Required properties: heat-resistant
- Eye glasses with side protection
- Wear anti-static footwear and clothing

SECTION 9: Physical and chemical properties

9.1 - Information on basic physical and chemical properties

<u>Physical state</u>	gaseous	<u>Appearance</u>	Liquid
<u>Colour</u>	colourless	<u>Odour</u>	hydrocarbons, aliphatic
Odour threshold	No data available		
pH	not applicable		
Melting point	No data available		
Freezing point	No data available		
Boiling point	< -20 °C		

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Flash point	< -20 °C
Evaporation rate	No data available
flammability	No data available
Lower explosion limit	1.4 % Vol.
Upper explosion limit	9.4 % Vol.
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Density	0.56 g/cm ³
Solubility (Water)	No data available
Solubility (Ethanol)	No data available
Solubility (Acetone)	No data available
Solubility (Organic solvents)	No data available
Log KOC	No data available
Auto-ignition temperature	287 °C
Decomposition temperature	No data available
Kinematic viscosity	No data available
Dynamic viscosity	No data available

Particle characteristics

Particle size	No data available
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9.2 - Other information

VOC content	100 %
Minimum ignition energy	No data available
Conductivity	No data available

SECTION 10: Stability and reactivity

10.1 - Reactivity

- Flammable
- Ignition hazard

10.2 - Chemical stability

- The product is chemically stable under recommended conditions of storage, use and temperature.

10.3 - Possibility of hazardous reactions

- No hazardous reaction when handled and stored according to provisions.

10.4 - Conditions to avoid

- Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.
- Vapours can form explosive mixtures with air.

10.5 - Incompatible materials

- No information available.

10.6 - Hazardous decomposition products

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- No known hazardous decomposition products.

SECTION 11: Toxicological information

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

Acute toxicity - Not classified

Toxicity : Mixture

LD50 oral (rat)	No data available
LD50 dermal (rat)	No data available
LD50 dermal (rabbit)	No data available
LC50 inhalation (rat)	No data available
LC50 inhalation dusts and mists (rat)	No data available
LC50 inhalation vapours (rat)	No data available

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

Toxicity : Substances

propane (74-98-6)	
LC50 inhalation vapours (rat)	20 mg/l
butane (106-97-8)	
LC50 inhalation vapours (rat)	658 mg/l

Skin corrosion/irritation - Not classified

Serious eye damage/eye irritation - Not classified

Respiratory or skin sensitisation - Not classified

Germ cell mutagenicity - Not classified

Carcinogenicity - Not classified

Reproductive toxicity - Not classified

STOT-single exposure - Not classified

STOT-repeated exposure - Not classified

Aspiration hazard - Not classified

11.2 - Information on other hazards

SECTION 12: Ecological information

12.1 - Toxicity

Toxicity : Mixture

EC50 48 hr crustacea	No data available
LC50 96 hr fish	No data available
ErC50 algae	No data available
ErC50 other aquatic plants	No data available
NOEC chronic fish	No data available

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NOEC chronic crustacea	No data available
NOEC chronic algae	No data available
NOEC chronic other aquatic plants	No data available

- The substance/mixture does not fulfill the criteria of the acute aquatic toxicity according to Regulation (EC) No 1272/2008 [CLP], Annex I.

12.2 - Persistence and degradability

Biochemical oxygen demand (BOD)	No data available
Chemical oxygen demand (COD)	No data available
% of biodegradation in 28 days	No data available

- No information available.

12.3 - Bioaccumulative potential

Bioconcentration factor (BCF)	No data available
Log KOC	No data available

- No indication of bioaccumulation potential.

12.4 - Mobility in soil

- No information available.

12.5 - Results of PBT and vPvB assessment

- This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

- This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

12.6 - Endocrine disrupting properties

12.7 - Other adverse effects

- Avoid release to the environment.

SECTION 13: Disposal considerations

13.1 - Waste treatment methods

Waste treatment methods

- Do not allow to enter into surface water or drains.
- Completely emptied packages can be recycled.
- Waste code product
- 16 05 04

Community or national or regional provisions - Dispose according to legislation.

SECTION 14: Transport information

14.1 - UN number or ID number

<u>UN number (ADR)</u>	:	UN1950
<u>UN number (RID)</u>	:	Not applicable
<u>UN number (ADN)</u>	:	Not applicable
<u>UN number (IMDG)</u>	:	Not applicable

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UN number (IATA) : Not applicable

14.2 - UN proper shipping name

UN proper shipping name (ADR) : AEROSOLS

14.3 - Transport hazard class(es)

ADR Transport hazard class(es) : 2

ADR Classification code: : 5F

Pictograms



Pictograms

14.4 - Packing group

Packing group :

14.5 - Environmental hazards

Environmental hazards : No

Marine pollutant : No

14.6 - Special precautions for user

ADR

ADR Classification code: : 5F
ADR Special provisions : 190+327+344+625
ADR Limited quantity (LQ) : 1L
ADR Excepted quantities : E0
ADR Packing instructions : P207 LP200
ADR Special packing provisions : PP87 RR6 L2
ADR Mixed packing provisions : MP9
Instructions for portable tanks and bulk containers :
Special provisions for portable tanks and bulk containers :
ADR tank code :
ADR tanks special provisions :
Vehicle for tank carriage :
ADR Transport category : 2
ADR Tunnel restriction code : D
ADR Special provisions loading, unloading and handling : CV9 CV12
Special provisions - Packages : V14
Special provisions - Bulk :
Special provisions - Operation : S2
ADR Hazard identification number (Kemler No.) :

14.7 - Maritime transport in bulk according to IMO instruments

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SECTION 15: Regulatory information

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

Substances REACH candidates None

Substances Annex XIV None

Substances Annex XVII None

VOC content 100 %

- Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]
- Directive 2004/42/EC on the limitation of emissions of volatile organic compounds

15.2 - Chemical Safety Assessment

Chemical safety assessment carried out for the product - Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

SDS versions

Version	Issue date	Author	Description of the amendments
1	11/16/2022		

Texts of the regulatory sentences

Aerosol 1	Aerosol - Category 1
Flam. Gas 1	Flammable gas. - Category 1
H220	Extremely flammable gas
H222	Extremely flammable aerosol
H229	Pressurised container: May burst if heated
Press. Gas	Gases under pressure

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