

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Universalgas AT2000

Revision date: 17.08.2021

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Universalgas AT2000
CFH No. 52107

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

Fuel

1.3. Details of the supplier of the safety data sheet

| | | |
|-----------------|-----------------------------|------------------------------|
| Company name: | CFH Löt- und Gasgeräte GmbH | |
| Street: | Bahnhofstraße 50 | |
| Place: | D-74254 Offenau | |
| Telephone: | +49 (0)7136 9594 0 | Telefax: +49 (0)7136 9594 44 |
| e-mail: | Info@cfh-gmbh.de | |
| Contact person: | Torsten Bogesch | |
| e-mail: | Info@cfh-gmbh.de | |
| Internet: | www.cfh-gmbh.de | |

1.4. Emergency telephone number: +49(0) 551 - 1 92 40 (GIZ-Nord, 24h)

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:
Flammable gases: Flam. Gas 1A
Gases under pressure: Liquefied gas
Hazard Statements:
Extremely flammable gas.
Contains gas under pressure; may explode if heated.

2.2. Label elements**Regulation (EC) No. 1272/2008**

Signal word: Danger

Pictograms:

**Hazard statements**

| | |
|------|---|
| H220 | Extremely flammable gas. |
| H280 | Contains gas under pressure; may explode if heated. |

Precautionary statements

| | |
|-----------|--|
| P101 | If medical advice is needed, have product container or label at hand. |
| P102 | Keep out of reach of children. |
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P377 | Leaking gas fire: Do not extinguish, unless leak can be stopped safely. |
| P381 | In case of leakage, eliminate all ignition sources. |
| P410+P403 | Protect from sunlight. Store in a well-ventilated place. |

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P501 Dispose of waste according to applicable legislation.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

| CAS No | Chemical name | | | Quantity |
|----------|---------------------------------------|--------------|------------------|----------|
| | EC No | Index No | REACH No | |
| | GHS Classification | | | |
| 106-97-8 | butane | | | 50-75 % |
| | 203-448-7 | 601-004-00-0 | 01-2119474691-32 | |
| | Flam. Gas 1, Liquefied gas; H220 H280 | | | |
| 74-98-6 | propane | | | 25-50 % |
| | 200-827-9 | 601-003-00-5 | 01-2119486944-21 | |
| | Flam. Gas 1, Liquefied gas; H220 H280 | | | |

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air.

After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

After ingestion

Rinse mouth immediately and drink 1 glass of water.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

 Water spray jet, Carbon dioxide (CO₂), Foam, Extinguishing powder.

5.2. Special hazards arising from the substance or mixture

Extremely flammable gas. Vapours can form explosive mixtures with air. Heating causes rise in pressure with risk of bursting.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Use water spray jet to protect personnel and to cool endangered containers.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Provide adequate ventilation.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Explosion risk.

6.3. Methods and material for containment and cleaning up

Ventilate affected area.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

No special measures are necessary.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.

Vapours can form explosive mixtures with air.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

Do not store together with: Oxidizing agent. Pyrophoric or self-heating substances.

7.3. Specific end use(s)

Fuel

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

| CAS No | Substance | ppm | mg/m ³ | fibres/ml | Category | Origin |
|----------|-----------|-----|-------------------|-----------|---------------|--------|
| 106-97-8 | Butane | 600 | 1450 | | TWA (8 h) | WEL |
| | | 750 | 1810 | | STEL (15 min) | WEL |

8.2. Exposure controls



Protective and hygiene measures

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff.

Eye/face protection

Wear eye/face protection.

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Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. 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.

Skin protection

Flame-retardant protective clothing. Wear anti-static footwear and clothing

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | | |
|-----------------|---------------|----------------|
| Physical state: | liquefied gas | |
| Colour: | colourless | |
| pH-Value: | | not determined |

Changes in the physical state

| | | |
|---|--|----------------|
| Melting point: | | not determined |
| Boiling point or initial boiling point and boiling range: | | not determined |
| Flash point: | | -74 °C |

Flammability

| | | |
|--------|--|----------------|
| Solid: | | not applicable |
| Gas: | | not determined |

Explosive properties

The product is not: Explosive.

| | | |
|----------------------------|--|-------------|
| Lower explosion limits: | | 1,5 vol. % |
| Upper explosion limits: | | 10,9 vol. % |
| Auto-ignition temperature: | | 365 °C |

Self-ignition temperature

| | | |
|--------|--|----------------|
| Solid: | | not applicable |
| Gas: | | not determined |

| | | |
|----------------------------|--|----------------|
| Decomposition temperature: | | not determined |
|----------------------------|--|----------------|

Oxidizing properties

The product is not: oxidising.

| | | |
|--------------------------------|--|----------|
| Vapour pressure: (at 20 °C) | | 8300 hPa |
|--------------------------------|--|----------|

| | | |
|---------------------|--|-----------------------|
| Density (at 20 °C): | | 0,6 g/cm ³ |
|---------------------|--|-----------------------|

Solubility in other solvents

not determined

| | | |
|--|--|----------------|
| Partition coefficient n-octanol/water: | | not determined |
|--|--|----------------|

| | | |
|--------------------------|--|----------------|
| Relative vapour density: | | not determined |
|--------------------------|--|----------------|

| | | |
|-------------------|--|----------------|
| Evaporation rate: | | not determined |
|-------------------|--|----------------|

9.2. Other information

| | | |
|----------------|--|----------------|
| Solid content: | | not determined |
|----------------|--|----------------|

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SECTION 10: Stability and reactivity

10.1. Reactivity

Extremely flammable gas.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

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

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

| CAS No | Chemical name | Log Pow |
|----------|---------------|---------|
| 106-97-8 | butane | 2,89 |
| 74-98-6 | propane | 2,36 |

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

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SECTION 14: Transport information
Land transport (ADR/RID)

14.1. UN number: UN 2037
14.2. UN proper shipping name: RECEPTACLES, SMALL, CONTAINING GAS (GAS CARTRIDGES)
14.3. Transport hazard class(es): 2
14.4. Packing group: -
 Hazard label: 2.1



Classification code: 5F
 Special Provisions: 191 303 344
 Limited quantity: 1 L
 Excepted quantity: E0
 Transport category: 2
 Tunnel restriction code: D

Inland waterways transport (ADN)

14.1. UN number: UN 2037
14.2. UN proper shipping name: Receptacles, small, containing gas (gas cartridges)
14.3. Transport hazard class(es): 2
14.4. Packing group: -
 Hazard label: 2.1



Classification code: 5F
 Special Provisions: 191 303 344
 Limited quantity: 1 L
 Excepted quantity: E0

Marine transport (IMDG)

14.1. UN number: UN 2037
14.2. UN proper shipping name: RECEPTACLES, SMALL, CONTAINING GAS (GAS CARTRIDGES)
14.3. Transport hazard class(es): 2.1
14.4. Packing group: -
 Hazard label: 2.1



Special Provisions: 191, 277, 303, 344
 Limited quantity: 1000 mL
 Excepted quantity: E0
 EmS: F-D, S-U

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 2037
14.2. UN proper shipping name: RECEPTACLES, SMALL, CONTAINING GAS
14.3. Transport hazard class(es): 2.1

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14.4. Packing group:

-

Hazard label:

2.1



Special Provisions:

A145 A167 A802

Limited quantity Passenger:

1 kg

Passenger LQ:

Y203

Excepted quantity:

E0

IATA-packing instructions - Passenger:

203

IATA-max. quantity - Passenger:

1 kg

IATA-packing instructions - Cargo:

203

IATA-max. quantity - Cargo:

15 kg

14.6. Special precautions for user

Warning: Flammable gases.

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

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 28, Entry 40

2010/75/EU (VOC):

100 % (600 g/l)

2004/42/EC (VOC):

100 % (600 g/l)

Information according to 2012/18/EU (SEVESO III):

18 Liquefied flammable gases, Category 1 or 2 (including LPG) and natural gas (-)

Additional information:

P2

National regulatory information

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D):

-- non-hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2,9.

Abbreviations and acronyms

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

CAS: Chemical Abstracts Service

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate

LC50: Lethal concentration, 50%

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LD50: Lethal dose, 50%
 LL50: Lethal loading, 50%
 EL50: Effect loading, 50%
 EC50: Effective Concentration 50%
 ErC50: Effective Concentration 50%, growth rate
 NOEC: No Observed Effect Concentration
 BCF: Bio-concentration factor
 PBT: persistent, bioaccumulative, toxic
 vPvB: very persistent, very bioaccumulative
 ADR: Accord européen sur le transport des marchandises dangereuses par Route
 (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 RID: Regulations concerning the international carriage of dangerous goods by rail
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation
 intérieures)
 IMDG: International Maritime Code for Dangerous Goods
 EmS: Emergency Schedules
 MFAG: Medical First Aid Guide
 IATA: International Air Transport Association
 ICAO: International Civil Aviation Organization
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships
 IBC: Intermediate Bulk Container
 VOC: Volatile Organic Compounds
 SVHC: Substance of Very High Concern
 For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

| Classification | Classification procedure |
|---------------------|--------------------------|
| Flam. Gas 1A; H220 | On basis of test data |
| Liquefied gas; H280 | |

Relevant H and EUH statements (number and full text)

H220 Extremely flammable gas.
 H280 Contains gas under pressure; may explode if heated.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)