

## SAFETY DATA SHEET

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1. Product identifier:  
**NACHFÜLLGAS 100ML**  
  
Product number: 52103
- 1.2. Relevant identified uses of the substance or mixture and uses advised against:  
Refillable gas for industrial use.
- 1.3. Details of the supplier of the safety data sheet:  
**CFH Löt- und Gasgeräte GmbH**  
Bahnhofstr. 50  
D-74254 Offenau  
Tel.: +49 7136 9594-0  
Fax: +49 7136 9594-44
- 1.3.1. Responsible person: Torsten Bogesch  
E-mail: bogesch.torsten@cfh-gmbh.de
- 1.4. Emergency telephone number: National Poisons Information Service: 844 892 0111

### SECTION 2: HAZARDS IDENTIFICATION

- 2.1. Classification of the substance or mixture  
  
Classification according to Regulation 1999/45/EC:

F+



**Extremely flammable**

**R phrases:**

**R 12** – Extremely flammable.

**S phrases:**

**S 2** – Keep out of the reach of children.

**S 16** – Keep away from sources of ignition - No smoking.

- 2.2. Label elements

**Hazardous substance content: -**

F+



**Extremely flammable**

**R phrases:**

**R 12** – Extremely flammable.

**S phrases:**

**S 2** – Keep out of the reach of children.

**S 16** – Keep away from sources of ignition - No smoking.

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50 °C.  
Do not pierce or burn, even after use.

„3”

2.3. Other hazards

Build-up of explosive mixtures possible without sufficient ventilation.

Test pressure of the aerosol cans: 18 bar

The gas first collects at the floor level and forms by the ignition temperature an explosive gas-air mixture.

Expanding liquid causes severe cooling.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

3.1 Substance:

Not applicable

3.2. Mixture:

Designation	CAS number:	EU number:	REACH reg. nr.:	Conc. (%)	Classification				
					67/548/EEC:		CLP		
					Haz. symb.	R phrase	Hazard symbol	Hazard classification	H phrase
<b>Propane</b> <sup>(2)</sup>	74-98-6	200-827-9	-	100	F+	12	GHS02 GHS04 Dgr	Flam. Gas 1 Press. Gas	H220
<b>Butane</b> <sup>(1) (2)</sup>	106-97-8	203-448-7	-		F+	12	GHS02 GHS04 Dgr	Flam. Gas 1 Press. Gas	H220

<sup>(1)</sup> Note C : Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

<sup>(2)</sup> Note U ( Table 3.1 ) :

When put on the market gases have to be classified as ‘Gases under pressure’, in one of the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to be assigned case by case.

**SECTION 4: FIRST AID MEASURES**

4.1. Description of first aid measures:

IN CASE OF INGESTION:

Measures:

- Uncharacteristic way of exposure (gas).

IN CASE OF INHALATION:

Measures:

- If vapours cause drowsiness, headache, blurred vision or irritation of eyes, nose or throat, bring the victim immediately to fresh air and protect against further exposure.
- Keep victim rest and warm.
- Immediately consult a doctor in case of severe disturbances or loss of consciousness.

IN CASE OF SKIN CONTACT:

Measures:

- In case of frostbite, rinse with plenty of water.
- Get medical aid.

IN CASE OF EYE CONTACT:

Measures:

- Flush with water for at least 10 minutes, eyelids must be open.
- If symptoms persist, obtain medical help.

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

None known.

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

None known.

## SECTION 5: FIREFIGHTING MEASURES

- 5.1. Extinguishing media:
- 5.1.1. Suitable extinguishing media:  
Carbon dioxide, foam, powder, water fog.
- 5.1.2. Unsuitable extinguishing media:  
Full water jet.
- 5.2. Special hazards arising from the substance or mixture:  
No other information available.
- 5.3. Advice for firefighters:  
Wear full protective clothing and self-contained breathing apparatus.  
In case of fire, remove the undamaged cans from the danger area.  
Cool containers with water fog.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

- 6.1. Personal precautions, protective equipment and emergency procedures:
- 6.1.1. Advices for non-emergency personnel:  
Prevent access by unauthorized persons. Only trained personnel wearing appropriate protective equipment that knows the necessary precautions well may stay at the accident scene.
- 6.1.2. For emergency responders:  
Remove ignition sources.  
Ensure good ventilation.
- 6.2. Environmental precautions:  
Do not empty into drains (danger of explosion).
- 6.3. Methods and material for containment and cleaning up:  
No other information available.
- 6.4. Reference to other sections:  
For further and detailed information see section 8 and 13.

## SECTION 7: HANDLING AND STORAGE

- 7.1. Precautions for safe handling:  
Observe conventional hygiene precautions.  
See precautionary phrases for aerosols (Section 2) and instructions on the can.  
Technical measures:  
Use only in well-ventilated areas.  
Precautions against fire and explosion:  
No specific prescriptions.
- 7.2. Conditions for safe storage, including any incompatibilities:  
Technical measures and storage condition:  
Store only in well-ventilated areas.  
Conditions according to TRG 300.  
Incompatible materials: none known.  
Packaging material: no specific prescription.
- 7.3. Specific end use(s):  
No specific instructions available.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1. Control parameters:

Exposure limit values:

EH40:

**Butane** (CAS number: 106-97-8): Long term exposure limit: 600 ppm, 1450 mg/m<sup>3</sup>; Short term exposure limit: 750 ppm, 1810 mg/m<sup>3</sup>

DNEL		Routes of exposure	Exposure frequency:	Remarks:
Worker	Consumer			
n.d.	n.d.	dermal	short term (acute) long term (repeated)	n.d.
n.d.	n.d.	inhalative	short term (acute) long term (repeated)	n.d.
n.d.	n.d.	oral	short term (acute) long term (repeated)	n.d.

PNEC			Exposure frequency:	Remarks:
Water	Soil	Air		
n.d.	n.d.	n.d.	short term (single use) long term (continuous)	n.d.



n.d.	n.d.	n.d.	short term (single use) long term (continuous)	n.d.
n.d.	n.d.	n.d.	short term (single use) long term (repeated)	n.d.

8.2. Exposure controls:

In case of a hazardous material with no controlled concentration limit it is the employer's duty to keep concentration levels down to a minimum achievable by existing scientific and technological means, where the hazardous substance poses no harm to workers.

8.2.1 Appropriate engineering controls:

The usual precautions for handling chemicals should be observed.

8.2.2. Individual protection measures, such as personal protective equipment:

1. Eye/face protection: not required when used as intended.
2. Skin protection:
  - a. Hand protection: not required when used as intended.
  - b. Other: not required when used as intended.
3. Respiratory protection: not required when used as intended.
4. Thermal hazard: none known.

8.2.3. Environmental exposure controls:

No specific prescription.

**The requirements detailed in Section 8 assume skilled work under normal conditions and usage of the product for appropriate aims. If conditions differ from normal or work is carried out under extreme conditions an expert's advice should be sought out before deciding upon further protective measures.**

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties:

Parameter	Test method:	Remarks:
1. <b>Appearance:</b>		colourless aerosol
2. <b>Odour:</b>		characteristic
3. Odour threshold:		no data available
4. pH value:		not applicable
5. Melting point/ freezing point:		no data available
6. Initial boiling point/boiling range:		no data available
7. Flash point:		ca. 80 °C
8. Evaporation rate:		no data available
9. Flammability:		extremely flammable
10. Upper/lower flammability or explosive limits:		lower: 1,5 Vol. % upper: 9,5 Vol. %
11. Vapour pressure:		3,9 bar      20 °C 7,5 bar      50 °C
12. Relative density:		No data available.
13. Solubility(ies):		not soluble in water
14. Partition coefficient: n-octanol/water:		no data available
15. Self-ignition temperature:		no data available
16. Degradation temperature:		no data available
17. Viscosity:		no data available
18. Explosive properties:		no data available
19. Oxidizing properties:		no data available

9.2. Other information:

Ignition temperature: ca. 400 °C

Density: (20 °C): 0,56 g/cm<sup>3</sup>

**SECTION 10: STABILITY AND REACTIVITY**10.1. Reactivity

None known.

10.2. Chemical stability

At normal temperature: stabile at general conditions of work.

10.3. Possibility of hazardous reactions:

Bursting at temperatures above 50 °C.

10.4. Conditions to avoid:

Not known.

10.5. Incompatible materials:

Not known.

10.6. Hazardous decomposition products:

In case of incomplete combustion, carbon monoxide is formed.

Thermal decomposition: under normal use - none.

## SECTION 11. TOXICOLOGICAL INFORMATION

- 11.1. Information on toxicological effects:  
Acute toxicity: none known.  
Irritation: none known.  
Corrosivity: none known.  
Sensitization: none known.  
Repeated dose toxicity: none known.  
Carcinogenity: none known.  
Mutagenicity: none known.  
Reproduction toxicity: none known.
- 11.1.1. For substances subject to registration, brief summaries of the information derived from the test conducted:  
None known.
- 11.1.2. Relevant toxicological properties of the hazardous substances:  
None known.
- 11.1.3. Information on likely routes of exposure:  
Ingestion, inhalation, skin and eye contact.
- 11.1.4. Symptoms related to the physical, chemical and toxicological characteristics:  
Inhalation of large amounts of propellant may cause narcotic effects.  
Prolonged or repeated exposure may cause a health hazard.  
Constantly repeated skin contact may cause dermatitic effects or frostbite.
- 11.1.5. Delayed and immediate effects as well as chronic effects from short and long-term exposure:  
When used and handled according to specifications, the product does not have any health effect based on our experience and the information provided to us.
- 11.1.6. Interactive effects:  
None known.
- 11.1.7. Absence of specific data:  
No data available
- 11.1.8. Other information:  
No further information is available.

## SECTION 12: ECOLOGICAL INFORMATION

- 12.1. Toxicity:  
No data available.
- 12.2. Persistence and degradability:  
No data available.
- 12.3. Bioaccumulation potential:  
No data available.
- 12.4. Mobility in soil  
No data available.
- 12.5. Results of PBT and vPvB assessment  
No Data Available
- 12.6. Other adverse effects:  
Water hazard class (WGK self-classification): not hazardous for water.

## SECTION 13: DISPOSAL CONSIDERATIONS

- 13.1. Waste treatment methods:  
Disposal according to the local regulations.
- 13.1.1. Information regarding the disposal of the product:  
No special recommendation from the manufacturer.  
During the disposal of the product, its residue and its packaging the national and local prescriptions should be observed. The EWC codes indicated below are only recommendations, but they may have to be changed due to special circumstances, in such cases new classification may be needed.
- 13.1.2. Information regarding the disposal of the packaging:  
The thoroughly emptied aerosol cans can be disposed of as normal waste (apply regional regulations).  
The full and partially emptied aerosol cans must be handle as hazardous waste (apply regional regulations).
- 13.1.3. Physical/chemical properties that may affect waste treatment options shall be specified:  
None known.
- 13.1.4. Sewage disposal:  
None known.
- 13.1.5. Special precautions for any recommended waste treatment:  
No data available.

## SECTION 14: TRANSPORT INFORMATION

- 14.1. UN Number:  
1950
- 14.2. UN proper shipping name:  
AEROSOLS

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- 14.3. Transport hazard class(es):  
ADR/RID:  
Hazard Class: 2  
Classification code: 5/F  
Limited quantity: 1 Liter  
Transport category: 2  
Label: 2.1  
IMDG:  
Hazard Class: 2 . 1  
EMS: F-D, S-U  
ICAO/IATA-DGR:  
Hazard Class: 2.1  
Passenger aircraft: 203/ 75 kg  
Cargo aircraft: 203/150kg
- 14.4. Packaging group:  
II.
- 14.5. Environmental hazard:  
None
- 14.6. Special precautions for user  
None
- 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code  
None

#### 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 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a 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
- COMMISSION REGULATION (EC) No 790/2009 of 10 August 2009 amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures
- DIRECTIVE 1999/45/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 May 1999 concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations
- REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 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
- COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- 15.2. Chemical safety assessment: no information available.

#### SECTION 16: OTHER INFORMATION

Information regarding the revision of the safety data sheet: none.  
Full text of the abbreviations in the safety data sheet:  
DNEL: Derived No Effect Level. PNEC: Predicted No Effect Concentration. CMR effects: Carcinogenicity, Mutagenicity and reproduction toxicity. PBT: Persistent, bioaccumulative and toxic. vPvB: very persistent and very bioaccumulative. n.d.: not defined. n.a.: not applicable.  
Data sources: no data available.  
Relevant H-Phrases (number and full text) of Section 2 and 3:  
**R 12** – Extremely flammable.  
Relevant H-Phrases (number and full text) of Section 2 and 3:  
**H220** – Extremely flammable gas.  
Training instructions: n.d.  
This safety data sheet had been prepared on the basis of information provided by the manufacturer/supplier and conform to the relevant regulations. The information, data and recommendations contained herein are provided in good faith, obtained from reliable sources and believed to be true and accurate as of the date issued; however, no representation is made as to the comprehensiveness of the information. The SDS shall be used only as a guide for handling the product; in the course of handling and using the product other considerations may arise or be required. Users are cautioned to determine the appropriateness and applicability of the above information to their particular circumstances and purposes and assume all risk associated with the use of

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this product. It is the responsibility of the user to fully comply with local, national and international regulations concerning the use of this product.