



**Cooling spray neutral**

Revision date: 26.03.2024

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

**1.1. Product identifier**

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

**Use of the substance/mixture**

see product name

**1.3. Details of the supplier of the safety data sheet**

Company name:	Friedrich Huber aeronova GmbH & Co.	
Street:	Sobrigauer Weg 4	
Place:	D-01257 Dresden	
Telephone:	0049-(0)351-27046-0	Telefax: 0049-(0)351-2704616
E-mail:	info@aeronova.de	
Contact person:	Labor	Telephone: 0049-(0)351-2704615
E-mail:	labor@aeronova.de	
Internet:	www.aeronova.de	

**1.4. Emergency telephone number:** 0049-(0)351-27046-0

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

**Regulation (EC) No 1272/2008**

Aerosol 1; H222-H229

Full text of hazard statements: see SECTION 16.

**2.2. Label elements**

**Regulation (EC) No 1272/2008**

**Signal word:** Danger

**Pictograms:**



**Hazard statements**

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

**Precautionary statements**

P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
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.

**2.3. Other hazards**

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.



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**SECTION 3: Composition/information on ingredients**

**3.2. Mixtures**

**Relevant ingredients**

CAS No	Chemical name	Quantity		
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
106-97-8	butane			65 - < 70 %
	203-448-7	601-004-00-0	01-2119474691-32	
	Flam. Gas 1, Press. Gas (Liq.); H220 H280			
74-98-6	propane			30 - < 35 %
	200-827-9	601-003-00-5	01-2119486944-21	
	Flam. Gas 1, Press. Gas (Liq.); H220 H280			

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

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**General information**

When in doubt or if symptoms are observed, get medical advice.  
If medical advice is needed, have product container or label at hand.

**After inhalation**

Provide fresh air.

**After contact with skin**

Wash with plenty of water. Take off contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.

**After contact with eyes**

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

**After ingestion**

not applicable

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

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

**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**

Carbon dioxide (CO<sub>2</sub>), Foam, Extinguishing powder.

**Unsuitable extinguishing media**

Water.

**5.2. Special hazards arising from the substance or mixture**

Extremely flammable aerosol. Pressurized container: May burst if heated. Vapours can form explosive mixtures with air.

**5.3. Advice for firefighters**



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

**Additional information**

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

**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

**General advice**

Remove all sources of ignition.

**For non-emergency personnel**

Ventilate affected area. Remove persons to safety.

**For emergency responders**

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

**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**

**For cleaning up**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

**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**

Do not pierce or burn, even after use.

**Advice on protection against fire and explosion**

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.

**Advice on general occupational hygiene**

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

**Further information on handling**

Heating causes rise in pressure with risk of bursting.

**7.2. Conditions for safe storage, including any incompatibilities**

**Requirements for storage rooms and vessels**

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)**

Aerosol

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

**Additional advice on limit values**

To date, no national critical limit values exist.



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**8.2. Exposure controls**

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

Wear eye/face protection. Suitable eye protection: Eye glasses with side protection EN 166

**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.

Suitable gloves type Gloves with long cuffs, heat insulating

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**

Wear anti-static footwear and clothing

**Respiratory protection**

Usually no personal respirative protection necessary.

**SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

Physical state:	Liquid	
Colour:	colourless	
Odour:	neutral	
Melting point/freezing point:		not applicable
Boiling point or initial boiling point and boiling range:		< -20 °C
Flammability:		not determined
Lower explosion limits:		1,5 vol. %
Upper explosion limits:		10,9 vol. %
Flash point:		< -20 °C
Auto-ignition temperature:		365 °C
Decomposition temperature:		not determined
pH-Value:		not applicable
Viscosity / kinematic:		not applicable
Water solubility: (at 20 °C)		practically insoluble
Solubility in other solvents		not determined
Partition coefficient n-octanol/water:		not determined
Vapour pressure:		not determined
Density (at 20 °C):		0,56 g/cm <sup>3</sup>
Relative vapour density:		not determined
Particle characteristics:		not applicable

**9.2. Other information**

**Information with regard to physical hazard classes**

**Explosive properties**

Heating may cause an explosion.

**Sustaining combustion:**

No data available

**Oxidizing properties**

The product is not: oxidising.

**Other safety characteristics**

**Evaporation rate:**

not determined



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Solid content:

not determined

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

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

**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 hazard classes as defined in Regulation (EC) No 1272/2008**

**Acute toxicity**

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

**ATEmix calculated**

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

**Irritation and corrosivity**

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

**Sensitising effects**

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

**Carcinogenic/mutagenic/toxic effects for reproduction**

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

**STOT-single exposure**

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

**STOT-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**

**Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

**Further information**

No further relevant information available.

**SECTION 12: Ecological information**

**12.1. Toxicity**

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

**12.2. Persistence and degradability**

The product has not been tested.



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**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 substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

**12.6. Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

**12.7. Other adverse effects**

No further relevant 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.

**List of Wastes Code - residues/unused products**

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

**Contaminated packaging**

Completely emptied packages can be recycled.

**SECTION 14: Transport information**

**Land transport (ADR/RID)**

**14.1. UN number or ID number:** UN 1950  
**14.2. UN proper shipping name:** AEROSOLS  
**14.3. Transport hazard class(es):** 2  
**14.4. Packing group:** -  
Hazard label: 2.1



Classification code: 5F  
Special Provisions: 190 327 344 625  
Limited quantity: 1 L  
Excepted quantity: E0  
Transport category: 2  
Tunnel restriction code: D

**Inland waterways transport (ADN)**

**14.1. UN number or ID number:** UN 1950  
**14.2. UN proper shipping name:** AEROSOLS



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**14.3. Transport hazard class(es):** 2  
**14.4. Packing group:** -  
Hazard label: 2.1



Classification code: 5F  
Special Provisions: 190 327 344 625  
Limited quantity: 1 L  
Excepted quantity: E0

**Marine transport (IMDG)**

**14.1. UN number or ID number:** UN 1950  
**14.2. UN proper shipping name:** AEROSOLS  
**14.3. Transport hazard class(es):** 2.1  
**14.4. Packing group:** -  
Hazard label: 2.1



Special Provisions: 63 190 277 327 344 381 959  
Limited quantity: 1000 mL  
Excepted quantity: E0  
EmS: F-D, S-U

**Air transport (ICAO-TI/IATA-DGR)**

**14.1. UN number or ID number:** UN 1950  
**14.2. UN proper shipping name:** AEROSOLS, FLAMMABLE  
**14.3. Transport hazard class(es):** 2.1  
**14.4. Packing group:** -  
Hazard label: 2.1



Special Provisions: A145 A167 A802  
Limited quantity Passenger: 30 kg G  
Passenger LQ: Y203  
Excepted quantity: E0  
IATA-packing instructions - Passenger: 203  
IATA-max. quantity - Passenger: 75 kg  
IATA-packing instructions - Cargo: 203  
IATA-max. quantity - Cargo: 150 kg

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

Warning: Flammable gases.

**14.7. Maritime transport in bulk according to IMO instruments**

not applicable

**SECTION 15: Regulatory information**

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



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**EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40

Directive 2010/75/EU on industrial emissions: 100 % (560 g/l)

Directive 2004/42/EC on VOC in paints and varnishes: 100 % (560 g/l)

Information according to Directive 2012/18/EU (SEVESO III): P3a FLAMMABLE AEROSOLS

**Additional information**

To follow: 850/2004/EC , 79/117/EEC , 689/2008/EC , 2008/47/EC  
Aerosol Directive (75/324/).

**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): 1,3,4,5,6,7,8,9,12,14,15,16.





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**Abbreviations and acronyms**

Flam. Gas: Flammable gases  
Aerosol: Aerosols  
Press. Gas (Liq.): Liquefied gas  
ADR: Accord européen sur le transport des marchandises dangereuses par Route  
(European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service  
LC50: Lethal concentration, 50%  
LD50: Lethal dose, 50%  
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  
DNEL: Derived No Effect Level  
DMEL: Derived Minimal Effect Level  
PNEC: Predicted No Effect Concentration  
ATE: Acute toxicity estimate  
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  
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)  
EmS: Emergency Schedules  
MFAG: Medical First Aid Guide  
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: ECHA Guidance on information requirements and chemical safety  
assessment, chapter R.20 (Table of terms and abbreviations).

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

Classification	Classification procedure
Aerosol 1; H222-H229	On basis of test data

**Relevant H and EUH statements (number and full text)**

H220 Extremely flammable gas.  
H222 Extremely flammable aerosol.  
H229 Pressurised container: May burst if heated.  
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

## Safety Data Sheet

according to Regulation (EC) No 1907/2006



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for adhering to existing laws and regulations.

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