



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

### 1.1 Product identifier

Trade name: Fluid-setral-FKR Aerosol

UFI: 3H30-409Q-G007-YFDW

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

General use: Lubricating agent

### 1.3 Details of the supplier of the safety data sheet

Company name: EUROTECH Maier Ernst GmbH

Street/POB-No.: Herrschaftswiesen 5

Postal Code, city: AT-6842 Koblach

WWW: www.eurotech.at

E-mail: office@eurotech.at

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Department responsible for information:

Telephone: +43 (0)5523 53852, Email: office@eurotech.at

### 1.4 Emergency telephone number

**GIZ-Nord, Göttingen****Telephone: +49 551-19240**

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

Aerosol 1; H222; H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

### 2.2 Label elements

#### Labelling (CLP)



Signal word:

**Danger**

Hazard statements:

H222

Extremely flammable aerosol.

H229

Pressurised container: May burst if heated.

Precautionary statements:

P102

Keep out of reach of children.

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.

P261

Avoid breathing spray.

P410+P412

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

P501

Dispose of contents/container to hazardous or special waste collection point.



### 2.3 Other hazards

Exposure to temperatures exceeding 50 °C will increase pressure: resulting in danger of bursting or explosion.

Potentially explosive mixtures may form if adequate ventilation is not provided.

Inhalation causes narcotic effects/intoxication.

Endocrine disrupting properties, Results of PBT and vPvB assessment:

No data available

## SECTION 3: Composition/information on ingredients

3.1 Substances: not applicable

### 3.2 Mixtures

Chemical characterisation: Aerosol with paraffin oil

Hazardous ingredients:

Identifiers	Designation Classification	Content
EC No. 203-448-7 CAS 106-97-8	n-Butane, pure Flam. Gas 1; H220. Press. Gas (Liq.); H280.	25 - 40 %
EC No. 200-827-9 CAS 74-98-6	Propane Flam. Gas 1; H220. Press. Gas (Comp.); H280.	25 - 40 %
EC No. 200-857-2 CAS 75-28-5	Isobutane, pure Flam. Gas 1; H220. Press. Gas (Comp.); H280.	< 10 %

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

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General information: First aider: Pay attention to self-protection!

In case of inhalation: Provide fresh air. In case of respiratory difficulties seek medical attention.

Following skin contact: After contact with skin, wash immediately with soap and plenty of water. Change contaminated clothing. In case of skin reactions, consult a physician.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After swallowing: Swallowing is not regarded as a possible way of exposition.

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

In case of inhalation: Inhalation causes narcotic effects/intoxication.

In case of prolonged exposure: Nausea, drowsiness, headache, agitation, fatigue, dizziness, unconsciousness.

In case of high vapour concentrations: CNS disorders, unconsciousness.

After contact with skin: Mild irritant.

After eye contact: Mild irritant.

### 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, foam, extinguishing powder, water spray jet.



Extinguishing media which must not be used for safety reasons:

Full water jet

## 5.2 Special hazards arising from the substance or mixture

Extremely flammable. Vapours form potentially explosive mixtures with air. Heavier than air, they proceed at floor level and may backflash over great distances when ignited.

May form dangerous gases and vapours in case of fire.

In case of fire may be liberated: carbon monoxide and carbon dioxide.

## 5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing.

Additional information:

Cool endangered containers with water spray and, if possible, remove from danger zone.

Heating will lead to pressure increase: Danger of bursting and explosion.

Do not allow fire water to penetrate into surface or ground water.

You have to dispose of contaminated extinguishing water according to the regulations of the authorities.

# SECTION 6: Accidental release measures

## 6.1 Personal precautions, protective equipment and emergency procedures

Eliminate all ignition sources if safe to do so.

Wear appropriate protective equipment. Keep unprotected people away.

Do not breathe vapour/aerosol. Provide adequate ventilation.

Avoid contact with skin and eyes.

## 6.2 Environmental precautions

Do not allow to penetrate into soil, waterbodies or drains.

## 6.3 Methods and material for containment and cleaning up

Take up with non-flammable, liquid binding material (e.g. sand/earth/diatomaceous earth/vermiculit) and perform disposal according to instructions. Wash spill area with plenty of water.

In case of greater quantities: Collect mechanically (use only explosion-proof equipment when pumping out).

Additional information:

Use explosion-proof equipment and non-sparking tools/utensils.

## 6.4 Reference to other sections

Refer additionally to section 8 and 13.

# SECTION 7: Handling and storage

## 7.1 Precautions for safe handling

Advices on safe handling:

Provide adequate ventilation, and local exhaust as needed. Use only in well-ventilated areas.

Avoid contact with skin and eyes. Do not breathe vapour/aerosol.

Wear appropriate protective equipment.

Precautions against fire and explosion:

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Do not spray on naked flames or any incandescent material.

Use only non-sparking tools. Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharges.

## 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep container tightly closed in a cool, well-ventilated place.

Protect from heat and direct sunlight.



Hints on joint storage: Do not store together with combustible or self-igniting materials or any highly flammable solids.  
Keep away from food, drink and animal feedingstuffs.

### 7.3 Specific end use(s)

No information available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
106-97-8	n-Butane, pure	Ireland: 8 hours	1000 ppm
75-28-5	Isobutane, pure	Ireland: 15 minutes	1000 ppm

### 8.2 Exposure controls

Provide good ventilation and/or an exhaust system in the work area.

### Personal protection equipment

#### Occupational exposure controls

Respiratory protection: Respiratory protection must be worn whenever the WEL levels have been exceeded.  
Use filter type A (= against vapours of organic substances) according to EN 14387.

The following applies to Propane in general:

If the concentration is exceeded, closed-circuit breathing apparatus must be used!

Hand protection:

Protective gloves according to EN 374.

Glove material: Nitrile rubber - Layer thickness: 0.40 mm

Breakthrough time: > 480 min

Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection:

Tightly sealed goggles according to EN 166.

Body protection:

Wear suitable protective clothing.

General protection and hygiene measures:

Keep away from heat sources, sparks and open flames.

Change contaminated clothing.

Do not breathe vapour/aerosol.

When using do not eat, drink or smoke.

Wash hands before breaks and after work.

### Environmental exposure controls

Refer to "6.2 Environmental precautions".

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state at 20 °C and 101.3 kPa

Form: Aerosol

Colour:

colourless

Odour:

characteristic

Odour threshold:

No data available

Melting point/freezing point:

No data available

Initial boiling point and boiling range:

-44 °C

Flammability:

Extremely flammable.

Upper/lower flammability or explosive limits:

LEL (Lower Explosion Limit): 1.40 Vol-%

UEL (Upper Explosive Limit): 32.00 Vol-%

Flash point/flash point range:

<= 0 °C

Decomposition temperature:

No data available



pH:	No data available
Viscosity, kinematic:	No data available
Solubility:	soluble in hydrocarbons
Water solubility:	insoluble
Partition coefficient: n-octanol/water:	No data available
Vapour pressure:	No data available
Density:	at 20 °C: 0.84 g/mL
Vapour density:	No data available
Particle characteristics:	Not applicable

## 9.2 Other information

Explosive properties:	Product is not explosive. Potentially explosive vapour/air mixtures may form.
Oxidizing characteristics:	No data available
Auto-ignition temperature:	No data available
Evaporation rate:	No data available
Additional information:	No data available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Extremely flammable aerosol.  
Vapours can form explosive mixtures with air.

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

Container under pressure.  
Heating will lead to pressure increase: Danger of bursting and explosion.

### 10.4 Conditions to avoid

Keep away from heat sources, sparks and open flames.  
Protect from direct exposure to sunlight and temperatures exceeding 50 °C.

### 10.5 Incompatible materials

Strong oxidizing agents

### 10.6 Hazardous decomposition products

	In case of fire may be liberated: Carbon monoxide and carbon dioxide.
Thermal decomposition:	No data available



## SECTION 11: Toxicological information

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

Toxicological effects: Acute toxicity (oral): Lack of data.  
Acute toxicity (dermal): Lack of data. Not an irritant  
Acute toxicity (inhalative): Lack of data.  
Skin corrosion/irritation: Lack of data.  
Serious eye damage/irritation: Lack of data. mild irritant  
Sensitisation to the respiratory tract: Lack of data.  
Skin sensitisation: Lack of data.  
Germ cell mutagenicity/Genotoxicity: Lack of data.  
Carcinogenicity: Lack of data.  
Reproductive toxicity: Lack of data.  
Effects on or via lactation: Lack of data.  
Specific target organ toxicity (single exposure): Lack of data.  
Specific target organ toxicity (repeated exposure): Lack of data.  
Aspiration hazard: Lack of data.

### 11.2 Information on other hazards

Endocrine disrupting properties: No data available

Other information: Not known to cause sensitization.

### Symptoms

In case of inhalation: Inhalation causes narcotic effects/intoxication.  
In case of prolonged exposure: Nausea, drowsiness, headache, agitation, fatigue, dizziness, unconsciousness.  
In case of high vapour concentrations: CNS disorders, unconsciousness.  
After contact with skin: Mild irritant.  
After eye contact: Mild irritant.

## SECTION 12: Ecological information

### 12.1 Toxicity

Further details: No data available

### 12.2 Persistence and degradability

Further details: No data available

### 12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:

No data available

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

No data available

### 12.6 Endocrine disrupting properties

No data available

### 12.7 Other adverse effects

General information: Do not allow to penetrate into soil, waterbodies or drains.



## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

Waste key number: 16 05 04\* = Gases in pressure containers (including halons) containing hazardous substances

\* = Evidence for disposal must be provided.

Recommendation: Special waste. Dispose of waste according to applicable legislation.  
Do not dispose of with household waste.  
Do not open with force or incinerate, even when empty.

#### Package

Waste key number: 15 01 10\* = packaging containing residues of or contaminated by dangerous substances  
\* = Evidence for disposal must be provided.

Recommendation: Handle contaminated packages in the same way as the substance itself.  
Handle empty containers with care. Incineration may cause explosion.  
Spray can must be completely empty for proper waste disposal.

## SECTION 14: Transport information

### 14.1 UN number or ID number

ADR/RID, IMDG, IATA-DGR: UN 1950

### 14.2 UN proper shipping name

ADR/RID, IMDG: UN 1950, AEROSOLS

IATA-DGR: UN 1950, AEROSOLS, FLAMMABLE

### 14.3 Transport hazard class(es)

ADR/RID: Class 2, Code: 5F

IMDG: Class 2, Subrisk -, see SP63

IATA-DGR: Class 2.1



### 14.4 Packing group

ADR/RID, IMDG, IATA-DGR: not applicable

### 14.5 Environmental hazards

Dangerous for the environment: Substance/mixture is not environmentally hazardous according to the criteria of the UN model regulations.

Marine pollutant: no

### 14.6 Special precautions for user

#### Land transport (ADR/RID)

Warning board: RID: Kemmler-number 23, UN number UN 1950

Hazard label: 2.1

Special Provisions: 190 327 344 625

Limited quantities: 1 L

EQ: E0

Package - Instructions: P207 LP200

Package - Special Provisions: PP87 RR6 L2

Special provisions for packing together: MP9

Tunnel restriction code: D

**Sea transport (IMDG)**

EmS:	F-D, S-U
Special Provisions:	63 190 277 327 344 381 959
Limited quantities:	See SP277
Excepted quantities:	E0
Package - Instructions:	P207, LP200
Package - Provisions:	PP87, L2
IBC - Instructions:	-
IBC - Provisions:	-
Tank instructions - IMO:	-
Tank instructions - UN:	-
Tank instructions - Provisions:	-
Stowage and handling:	SW1 SW22
Segregation:	SG69
Properties and observations:	-
Segregation group:	none

**Air transport (IATA)**

Hazard label:	Flamm. gas
Excepted Quantity Code:	E0
Passenger and Cargo Aircraft: Ltd.Qty.:	Pack.Instr. Y203 - Max. Net Qty/Pkg. 30 kg G
Passenger and Cargo Aircraft:	Pack.Instr. 203 - Max. Net Qty/Pkg. 75 kg
Cargo Aircraft only:	Pack.Instr. 203 - Max. Net Qty/Pkg. 150 kg
Special Provisions:	A145 A167 A802
Emergency Response Guide-Code (ERG):	10L

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

No data available

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations - EC member states**

Volatile organic compounds (VOC):

approx. 55 % by weight = 462 g/L

Further regulations, limitations and legal requirements:

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances  
[Seveso-III-Directive]

Physical hazards: Code P3a, Quantity threshold 150 000 kg / 500 000 kg

**15.2 Chemical Safety Assessment**

For this mixture a chemical safety assessment is not required.

**SECTION 16: Other information**

Wording of the H-phrases under paragraph 2 and 3:

H220 = Extremely flammable gas.

H222 = Extremely flammable aerosol.

H229 = Pressurised container: May burst if heated.

H280 = Contains gas under pressure; may explode if heated.

Reason of change: General revision

Date of first version: 25/4/2005

Department issuing data sheet: see section 1: Department responsible for information



**SAFETY DATA SHEET**

according to Regulation (EC) No 1907/2006 (REACH) and Regulation (EU) No 2020/878

**Fluid-setral-FKR Aerosol**

Material number 721400

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Version: 14.1

Replaces version: 14.0

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Abbreviations and acronyms:

- ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- Aerosol: Aerosol
- AS/NZS: Australian Standards/New Zealand Standards
- CAS: Chemical Abstracts Service
- CFR: Code of Federal Regulations
- CLP: Classification, Labelling and Packaging
- CNS: Central Nervous System
- DMEL: Derived minimal effect level
- DNEL: Derived no-effect level
- EC: European Community
- EN: European Standard
- EQ: Excepted quantities
- EU: European Union
- Flam. Gas: Flammable gases
- IATA: International Air Transport Association
- IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
- IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
- IMDG Code: International Maritime Dangerous Goods Code
- LEL: Lower Explosion Limit
- MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
- OEL: Occupational Exposure Limit Value
- OSHA: Occupational Safety and Health Administration
- PBT: Persistent, bioaccumulative and toxic
- PNEC: Predicted no-effect concentration
- Press. Gas: Gases under pressure
- REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
- RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
- TLV: Threshold Limit Value
- TRGS: Technical Rules for Hazardous Substances
- UN: United Nations
- vPvB: Very persistent and very bioaccumulative
- WEL: Workplace Exposure Limit

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.