



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

1.1 Product identifier

Trade name: Lubex Aerosol

This safety data sheet applies to all pressure vessels (aerosol cans) exceeding 50 ml capacity.

UFI: XCF0-W08R-200K-9FU1

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

Telephone: +43 (0)5523 53852

Telefax: +43 (0)5523 53852 4

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.

STOT SE 3; H336 May cause drowsiness or dizziness.

Aquatic Chronic 2; H411 Toxic to aquatic life with long lasting effects.

(EUH066) Repeated exposure may cause skin dryness or cracking.

2.2 Label elements

Labelling (CLP)



Signal word:

Danger

Hazard statements:

H222

Extremely flammable aerosol.

H229

Pressurised container: May burst if heated.

H336

May cause drowsiness or dizziness.

H411

Toxic to aquatic life with long lasting effects.

EUH066

Repeated exposure may cause skin dryness or cracking.



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.
	P271	Use only outdoors or in a well-ventilated area.
	P273	Avoid release to the environment.
	P312	Call a POISON CENTER/doctor if you feel unwell.
	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.

Special labelling

Text for labelling: Contains n-Pentane.

2.3 Other hazards

If higher concentrations occur: Inhalation causes narcotic effects/intoxication.
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.

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: Blend of active ingredients with propellant

Hazardous ingredients:

Identifiers	Designation Classification	Content
EC No. 203-692-4 CAS 109-66-0	n-Pentane Flam. Liq. 2; H225. STOT SE 3; H336. Asp. Tox. 1; H304. Aquatic Chronic 2; H411. (EUH066).	25 - 50 % [mass]
REACH 01-2119472128-37-xxxx EC No. 204-065-8 CAS 115-10-6	Dimethyl ether Flam. Gas 1; H220. Press. Gas (Liq.); H280.	10 - 25 % [mass]

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:	Move victim to fresh air, put at rest and loosen restrictive clothing. Keep airway open. In case of respiratory difficulties seek medical attention. In case of irregular breathing or respiratory arrest provide artificial respiration.
Following skin contact:	Remove residues with soap and 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. In case of troubles or persistent symptoms, 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

May cause drowsiness or dizziness.

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: All extinguishing agents can be applied.

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:

Container under pressure. Heating will lead to pressure increase: Danger of bursting and explosion. Cool endangered containers with water spray and, if possible, remove from danger zone.

Use water spray jet to knock down vapours.

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

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 enter into ground-water, surface water or drains.

If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

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. Thoroughly clean surrounding area.

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 prolonged, intensive skin contact and contact with the eyes. 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. Keep container dry.

Protect from heat and direct sunlight.

Hints on joint storage:

Keep away from oxidizing agents.

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
109-66-0	n-Pentane	Europe: IOELV: TWA Ireland: 8 hours	3000 mg/m ³ ; 1000 ppm 3000 mg/m ³ ; 1000 ppm
115-10-6	Dimethyl ether	Europe: IOELV: TWA Ireland: 8 hours	1920 mg/m ³ ; 1000 ppm 1920 mg/m ³ ; 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.

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

Hand protection:

Recommendation: Protective gloves according to EN 374.

Glove material: Nitrile rubber or fluoro rubber (0.4 mm)

Unsuitable materials: natural rubber, butyl caoutchouc (butyl rubber).

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.

Wash hands before breaks and after work.

When using do not eat, drink or smoke.

Change contaminated clothing.

**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:	(Dimethyl ether) -25 °C
Flammability:	Extremely flammable.
Upper/lower flammability or explosive limits:	LEL (Lower Explosion Limit): (n-Pentane) 1.40 Vol-% UEL (Upper Explosive Limit): (Dimethyl ether) 26.00 Vol-%
Flash point/flash point range:	(n-Pentane) -49 °C
Auto-ignition temperature:	(Dimethyl ether) 235 °C
Decomposition temperature:	No data available
pH:	No data available
Viscosity, kinematic:	No data available
Water solubility:	slightly miscible
Partition coefficient: n-octanol/water:	No data available
Vapour pressure:	at 20 °C: (Dimethyl ether) 5200 hPa
Density:	at 20 °C: 0.57 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:	not self-igniting
Solvent content:	72 %
Evaporation rate:	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

Product is stable under normal 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

Oxidising agent

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.
- Acute toxicity (inhalative): Lack of data.
- Skin corrosion/irritation: Lack of data.
- Serious eye damage/irritation: Lack of data.
- 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): STOT SE 3; H336 = May cause drowsiness or dizziness.
- Specific target organ toxicity (repeated exposure): Lack of data.
- Aspiration hazard: Based on available data, the classification criteria are not met.

11.2 Information on other hazards

Endocrine disrupting properties: No data available

Symptoms

In case of inhalation: Vapours may cause drowsiness and dizziness.
Other symptoms: Mucous membrane irritation, dizziness, headache, narcosis, unconsciousness. Pulmonary edema is possible.
After contact with skin:
Repeated exposure may cause skin dryness or cracking. This may lead to irritation/dermatitis.
After eye contact: May cause irritations.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Information about n-Pentane:
Daphnia toxicity: EC50 Daphnia magna (Big water flea): 9.74 mg/L/48h

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 enter into ground-water, surface water 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: This material and its container must be disposed of as hazardous waste.
Do not dispose of with household waste. Discharge into the environment must be avoided.
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: Dispose of waste according to applicable legislation.
Empty carefully and completely, if possible.**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 environmentally hazardous according to the criteria of the UN model regulations.

Marine pollutant: yes





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):

72 % by weight = 374 g/L



Labelling of packaging with <= 125mL content



Signal word:

Danger

Hazard statements:

H222

Extremely flammable aerosol.

H229

Pressurised container: May burst if heated.

H336

May cause drowsiness or dizziness.

EUH066

Repeated exposure may cause skin dryness or cracking.

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.

P271

Use only outdoors or in a well-ventilated area.

P312

Call a POISON CENTER/doctor if you feel unwell.

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.

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

Environmental hazards: Code E2, Quantity threshold 200 000 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.

H225 = Highly flammable liquid and vapour.

H229 = Pressurised container: May burst if heated.

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

H304 = May be fatal if swallowed and enters airways.

H336 = May cause drowsiness or dizziness.

H411 = Toxic to aquatic life with long lasting effects.

EUH066 = Repeated exposure may cause skin dryness or cracking.

Reason of change:

General revision

Date of first version:

29/12/2001

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

Lubex Aerosol

Material number 814400

Revision date: 25/1/2023

Version: 12.2

Replaces version: 12.1

Language: en-IE

Date of print: 3/2/2023

Page: 10 of 10

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
Aquatic Chronic: Hazardous to the aquatic environment - chronic
AS/NZS: Australian Standards/New Zealand Standards
Asp. Tox.: Aspiration toxicity
CAS: Chemical Abstracts Service
CFR: Code of Federal Regulations
CLP: Classification, Labelling and Packaging
DMEL: Derived minimal effect level
DNEL: Derived no-effect level
EC: European Community
EC50: Effective Concentration 50%
EN: European Standard
EQ: Excepted quantities
EU: European Union
Flam. Gas: Flammable gases
Flam. Liq.: Flammable liquid
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
STOT SE: Specific target organ toxicity - single exposure
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.