



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

### 1.1 Product identifier

Trade name: Seize-Ex-Spray

This safety data sheet pertains to the following products:

810060 - Seize-Ex Aerosol - 60ml

810400 - Seize-Ex Aerosol - 400ml

UFI: 2KH0-2072-100F-HAYQ

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

General use: Lubricating agent, Corrosion protection 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

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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.

Aquatic Chronic 3; H412 Harmful to aquatic life with long lasting effects.

### 2.2 Label elements

#### Labelling (CLP)



Signal word: **Danger**

Hazard statements:	H222	Extremely flammable aerosol.
	H229	Pressurised container: May burst if heated.
	H412	Harmful to aquatic life with long lasting effects.



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.
	P273	Avoid release to the environment.
	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

Vapours may cause drowsiness and dizziness.

Contact with the product can cause cold burns or frostbite.

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. 203-448-7 CAS 106-97-8	n-Butane, pure Flam. Gas 1; H220. Press. Gas (Liq.); H280.	15 - 30 %
EC No. 200-827-9 CAS 74-98-6	Propane Flam. Gas 1; H220. Press. Gas (Comp.); H280.	15 - 30 %
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).	5 - 15 %

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. If the casualty has difficulty breathing, call a doctor immediately.

In case of irregular breathing or respiratory arrest provide artificial respiration.

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

In case of frostbite, wash with plenty of water; do not remove clothing. Immediately get medical attention.



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

In case of inhalation: Vapours may cause drowsiness and dizziness.  
After contact with skin: Contact with the product can cause cold burns or frostbite.  
Repeated exposure may cause skin dryness or cracking.  
After eye contact: May cause irritations.

#### 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.  
Heating will lead to pressure increase: Danger of bursting and explosion.  
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.  
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.  
Provide adequate ventilation. Do not breathe vapour/aerosol.  
Avoid contact with skin and eyes.  
Wear appropriate protective equipment.

### 6.2 Environmental precautions

Do not allow to enter into ground-water, surface water or drains.

### 6.3 Methods and material for containment and cleaning up

Absorb spilled liquid and place in closed containers for disposal. 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.  
Do not breathe vapour/aerosol. Do not spray into eyes or onto the skin.  
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 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
109-66-0	n-Pentane	Europe: IOELV: TWA Ireland: 8 hours	3000 mg/m <sup>3</sup> ; 1000 ppm 3000 mg/m <sup>3</sup> ; 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.  
When using do not eat, drink or smoke.  
Wash hands before breaks and after work.  
Have eye wash bottle or eye rinse ready at work place.

**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): 1.50 Vol-% UEL (Upper Explosive Limit): 11.00 Vol-%
Flash point/flash point range:	-97 °C
Decomposition temperature:	No data available
pH:	No data available
Viscosity, kinematic:	No data available
Solubility:	No data available
Partition coefficient: n-octanol/water:	No data available
Vapour pressure:	No data available
Density:	No data available
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**

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

**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): Lack of data.  
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.  
After contact with skin: Contact with the product can cause cold burns or frostbite.  
Repeated exposure may cause skin dryness or cracking.  
After eye contact: May cause irritations.

## SECTION 12: Ecological information

### 12.1 Toxicity

Aquatic toxicity: Harmful 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: Special waste. Dispose of waste according to applicable legislation.  
Container under pressure. 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 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. 75 % by weight

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.

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.

H412 = Harmful 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: **28/12/2001**Department issuing data sheet: **see section 1: Department responsible for information**

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.