



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

1.1 Product identifier

Trade name: HTF Aerosol 400 ml

UFI: T5F0-V0VX-F00K-YSNW

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.

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.

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

Inhalation causes narcotic effects/intoxication. Asphyxiant in high concentrations.

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

With air, vapours form potentially explosive mixtures, which are heavier than air.

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: Active agent (Silikon Compound) with propellant

Hazardous ingredients:

Identifiers	Designation Classification	Content
REACH 01-2119475602-38-xxxx EC No. 201-142-8 CAS 78-78-4	i-Pentane Flam. Liq. 1; H224. STOT SE 3; H336. Asp. Tox. 1; H304. Aquatic Chronic 2; H411. (EUH066).	< 1 %
EC No. 203-448-7 CAS 106-97-8	n-Butane, pure Flam. Gas 1; H220. Press. Gas (Liq.); H280.	10 - 25 %
EC No. 200-827-9 CAS 74-98-6	Propane Flam. Gas 1; H220. Press. Gas (Comp.); H280.	10 - 25 %
EC No. 200-857-2 CAS 75-28-5	Isobutane, pure Flam. Gas 1; H220. Press. Gas (Comp.); H280.	10 - 25 %

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

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: Seek medical assistance when anyone has symptoms apparently due to inhalation or contact with skin or eyes.

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. If victim is at risk of losing consciousness, position and transport on their side.

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. 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. Asphyxiant in high concentrations.

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

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: Foam, carbon dioxide, 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. With air, vapours form potentially explosive mixtures, which are heavier than air. Beware of reignition.

In case of fire may be liberated: Silicon dioxide, 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 causes rise in pressure with risk of bursting.

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. Remove persons not involved upwind.

Do not breathe vapour/aerosol. Provide adequate ventilation.

Avoid contact with skin and eyes. Wear appropriate protective equipment.

Keep unprotected people away.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Clean the floor and all object contaminated by this material.

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.

Special danger of slipping by leaking/spilling product.

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:

Keep away from strong acids, strong bases and 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
78-78-4	i-Pentane	Europe: IOELV: TWA Ireland: 8 hours	3000 mg/m ³ ; 1000 ppm 3000 mg/m ³ ; 1000 ppm
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. If the concentration is exceeded, closed-circuit breathing apparatus must be used!

Hand protection: Recommendation: Protective gloves according to EN 374. 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.

Do not breathe vapour/aerosol.

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:	whitish, transparent
Odour:	characteristic
Odour threshold:	No data available
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flammability:	Extremely flammable.
Upper/lower flammability or explosive limits:	LEL (Lower Explosion Limit): 1.50 Vol-% UEL (Upper Explosive Limit): 10.90 Vol-%
Flash point/flash point range:	approx. -80 °C
Decomposition temperature:	No data available
pH:	No data available
Viscosity, kinematic:	No data available
Water solubility:	practically insoluble
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

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

10.5 Incompatible materials

Keep away from acids, alkalis and oxidizing agents.



10.6 Hazardous decomposition products

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

Measurements taken at temperatures exceeding 150 °C have revealed that a small quantity of formaldehyde splits off through oxidative decomposition.

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

Other information: For the silicone component: There are no known health risks.

Symptoms

In case of inhalation:
Inhalation causes narcotic effects/intoxication. Asphyxiant in high concentrations.
In case of prolonged exposure: Nausea, drowsiness, headache, agitation, fatigue, dizziness, unconsciousness.
After eye contact: May cause irritations.

SECTION 12: Ecological information

12.1 Toxicity

Further details: No data available

12.2 Persistence and degradability

Further details: For the silicone component: Product is biodegradable with difficulty.

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* = Aerosol

* = Evidence for disposal must be provided.

Recommendation: This material and its container must be disposed of as hazardous waste. Dispose of waste according to applicable legislation. 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. 50 % 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.

H224 = Extremely 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.

**SAFETY DATA SHEET**

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

HTF Aerosol 400 ml

Material number 811400

Revision date: 25/1/2023

Version: 13.3

Replaces version: 13.2

Language: en-IE

Date of print: 3/2/2023

Page: 9 of 9

Reason of change: **General revision**Date of first version: **30/1/2002**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
- 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.