

1 Identification

- **Product identifier**
- **Trade name:** COPPER SPRAY
- **Application of the substance / the mixture**
Lubrication, anticorrosive
Only for proper handling.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
BUCHER_AG_LANGENTHAL
MOTOREX-Schmiertechnik
Bern-Zürich-Strasse_31__
CH-4901_Langenthal__
Telefon_+41_(0)62_919_75_75

Lube-Tech
Lubrication Technologies, Inc.
900 Mendelssohn Avenue North
US-55427 Golden Valley, Minnesota
Phone: 001 763 417 1357
- **Information department:** msds@motorex.com
- **Emergency telephone number:**
Toxicological Information Centre
CH-8028 Zurich
info@toxi.ch
T. +41 (0)44 251 51 51
USA + Kanada: 1 800 424 9300 (Chemtrec Chemical Manufacturers Association, Arlington, VA 22209)

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurized container: May burst if heated.



GHS07

STOT SE 3 H336 May cause drowsiness or dizziness.

Aquatic Acute 3 H402 Harmful to aquatic life.

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

- **Label elements**
- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

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- **Hazard pictograms**



GHS02 GHS07

- **Signal word** Danger

- **Hazard-determining components of labeling:**

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics

- **Hazard statements**

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

H336 May cause drowsiness or dizziness.

H402 Harmful to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

- **Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P251 Do not pierce or burn, even after use.

P211 Do not spray on an open flame or other ignition source.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P273 Avoid release to the environment.

P271 Use only outdoors or in a well-ventilated area.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER/doctor if you feel unwell.

P405 Store locked up.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



Health = 0

Fire = 4

Reactivity = 3

- **HMIS-ratings (scale 0 - 4)**



HEALTH 0 Health = 0

FIRE 4 Fire = 4

REACTIVITY 3 Reactivity = 3

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

- **Description:** Mixture of the substances listed below with nonhazardous additions.

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· Dangerous components:		
CAS: 106-97-8 Reg.nr.: 01-2119474691-32	butane ⚠ Flam. Gas 1, H220; Press. Gas, H280	25-50%
CAS: 64745-49-0 Reg.nr.: 01-2119473851-33-xxxx	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics ⚠ Flam. Liq. 2, H225; ⚠ Asp. Tox. 1, H304; ⚠ STOT SE 3, H336	10-25%
CAS: 74-98-6 Reg.nr.: 01-2119486944-21	propane ⚠ Flam. Gas 1, H220; Press. Gas, H280	5-10%
CAS: 64742-48-9 Reg.nr.: 01-2119463258-33	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics ⚠ Flam. Liq. 3, H226; ⚠ Asp. Tox. 1, H304; ⚠ STOT SE 3, H336	1-3%
CAS: 75-28-5 Reg.nr.: 01-2119485395-27	isobutane ⚠ Flam. Gas 1, H220; Flam. Liq. 1, H224; Press. Gas, H280	1-2.5%
CAS: 7440-50-8 Reg.nr.: 01-2119480154-42	copper ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410	0.25-1%
CAS: 7440-66-6	zinc powder -zinc dust (stabilized) ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410	0.25-1%

4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**
No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.

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- **Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights. Do not pierce or burn, even after use.
Do not spray on a naked flame or any incandescent material.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Observe official regulations on storing packagings with pressurized containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Storage class:** 2 B
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

106-97-8 butane

REL	Long-term value: 1900 mg/m ³ , 800 ppm
TLV	Short-term value: 2370 mg/m ³ , 1000 ppm

74-98-6 propane

PEL	Long-term value: 1800 mg/m ³ , 1000 ppm
REL	Long-term value: 1800 mg/m ³ , 1000 ppm
TLV	refer to Appendix F in TLVs and BEIs book

75-28-5 isobutane

TLV	Short-term value: 2370 mg/m ³ , 1000 ppm
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- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Wash hands before breaks and at the end of work.

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- **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

- **Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:** Not required.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form: Liquefied gas

Color: Gold colored

- **Odor:** Solvent-like

- **Odor threshold:** Not determined.

- **pH-value:** Not determined.

- **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Not applicable, as aerosol.

- **Flash point:** < 0 °C (< 32 °F)

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:** 470 °C (878 °F) (DIN 51794)

- **Decomposition temperature:** Not determined.

- **Auto igniting:** Product is not selfigniting.

- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

- **Explosion limits:**

Lower: 0.9 Vol %

Upper: 8.5 Vol %

- **Vapor pressure at 20 °C (68 °F):** 30 hPa (23 mm Hg)

- **Density at 20 °C (68 °F):** 0.697 g/cm³ (5.816 lbs/gal) (ASTM D 4052)

- **Relative density** Not determined.

- **Vapor density** Not determined.

- **Evaporation rate** Not applicable.

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- | | |
|---|--|
| · Solubility in / Miscibility with Water: | Not miscible or difficult to mix. |
| · Partition coefficient (n-octanol/water): | Not determined. |
| · Viscosity: | |
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |
| VOC content: | 73.9 % |
| | 515.1 g/l / 4.30 lb/gl |
| · Other information | No further relevant information available. |

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish

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- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (Self-classification according VwVwS, 17.05.1999): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Harmful to aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:**
Disposal must be made according to official regulations.
Discharged containers can contain flammable or explosive vapours.

14 Transport information

- | | |
|---|--|
| <ul style="list-style-type: none"> · UN-Number · DOT, ADR, ADN, IMDG, IATA | <p style="text-align: center;">UN1950</p> |
| <ul style="list-style-type: none"> · UN proper shipping name · DOT, IATA · ADR/ADN · IMDG | <p style="text-align: center;">Aerosols, flammable
1950 Aerosols, ENVIRONMENTALLY
HAZARDOUS
AEROSOLS</p> |
| <ul style="list-style-type: none"> · Transport hazard class(es) · DOT | <div style="text-align: center;">  </div> |
| <ul style="list-style-type: none"> · Class · Label | <p style="text-align: center;">2.1
2.1</p> |
| <ul style="list-style-type: none"> · ADR/ADN | <div style="text-align: center;">  </div> |
| <ul style="list-style-type: none"> · Class | <p style="text-align: center;">2 5F Gases</p> |

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· Label	2.1
· IMDG, IATA	
	
· Class	2.1
· Label	2.1
· Packing group	
· DOT, ADR,ADN, IMDG, IATA	Void
· Environmental hazards:	
· Marine pollutant:	No
· Special marking (ADR/ADN):	Symbol (fish and tree)
· Special precautions for user	Warning: Gases
· Danger code (Kemler):	-
· EMS Number:	F-D,S-U
· Stowage Code	SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.
· Segregation Code	SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR/ADN	
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· UN "Model Regulation":	UN 1950 AEROSOLS, 2.1, ENVIRONMENTALLY HAZARDOUS

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15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

· Section 355 (extremely hazardous substances):	
None of the ingredients is listed.	

· Section 313 (Specific toxic chemical listings):	
7440-50-8	copper
7440-66-6	zinc powder -zinc dust (stabilized)

· TSCA (Toxic Substances Control Act):	
106-97-8	butane
64745-49-0	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics
74-98-6	propane
64742-48-9	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics
75-28-5	isobutane
7440-50-8	copper
78-78-4	isopentane

· Proposition 65	
· Chemicals known to cause cancer:	
None of the ingredients is listed.	

· Chemicals known to cause reproductive toxicity for females:	
None of the ingredients is listed.	

· Chemicals known to cause reproductive toxicity for males:	
None of the ingredients is listed.	

· Chemicals known to cause developmental toxicity:	
None of the ingredients is listed.	

· Carcinogenic categories		
· EPA (Environmental Protection Agency)		
7440-50-8	copper	D
7440-66-6	zinc powder -zinc dust (stabilized)	II

· TLV (Threshold Limit Value established by ACGIH)	
None of the ingredients is listed.	

· NIOSH-Ca (National Institute for Occupational Safety and Health)	
None of the ingredients is listed.	

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** Abteilung Produktsicherheit
- **Date of preparation / last revision** 03/22/2016 / -
- **Abbreviations and acronyms:**
Flam. Gas 1: Flammable gases, Hazard Category 1

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*Flam. Aerosol 1: Flammable aerosols, Hazard Category 1**Press. Gas: Gases under pressure: Compressed gas**Flam. Liq. 1: Flammable liquids, Hazard Category 1**Flam. Liq. 2: Flammable liquids, Hazard Category 2**Flam. Liq. 3: Flammable liquids, Hazard Category 3**STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3**Asp. Tox. 1: Aspiration hazard, Hazard Category 1**Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1**Aquatic Acute 3: Hazardous to the aquatic environment - AcuteHazard, Category 3**Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1**Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3*

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