Printing date 27.11.2018 Version number 42 Revision: 27.11.2018

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

· 1.1 Product identifier

· Trade name: Kupferpasten-Spray

· Article number: LOS420

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

No further relevant information available.

· Application of the substance / the mixture Lubricant

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

EURO-LOCK Vertriebs-GmbH

Nordweststsr. 3 D-59387 Ascheberg Tel.: +49 (0) 2593 95887-0

Fax.: +49 (0) 2593 95887-29

www.euro-lock.de

· Further information obtainable from:

Tel.: +49 (0) 2593 95887-0 E-Mail: ifo@euro-lock.de **1.4 Emergency telephone number:** +49 (0) 2593 95887-0

Monday - Thursday 8:00 - 17:00 CET, Friday 8:00 - 13:00 CET

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS02 flame

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



GHS09 environment

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



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms







GHS02 GHS07 GHS09

- · Signal word Danger
- $\cdot \ Hazard\text{-}determining \ components \ of \ labelling:$

Hydrocarbons, C7, n-alkanes, isoalkanes, cycloalkanes

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cycloalkanes, < 5 % n-hexane

· Hazard statements

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

H315 Causes skin irritation.

(Contd. on page 2)

Printing date 27.11.2018 Version number 42 Revision: 27.11.2018

Trade name: Kupferpastenspray

(Contd. of page 1)

H411 Toxic to aquatic life with long lasting effects.

· Precautionary statements

- P101 If medical advice is needed, have product container or label at hand.
- 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.
- P280 Wear protective gloves.
- P391 Collect spillage.
- P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C.
- P501 Dispose of contents/container to hazardous or special waste collection point.
- · Additional information:

Buildup of explosive mixtures possible without sufficient ventilation.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.2 Mixtures
- · **Description:** Mixture of substances listed below with nonhazardous additions.

· Dangerous components:		
CAS: 75-28-5 EINECS: 200-857-2 Reg.nr.: 01-2119485395-27-xxxx	isobutane Flam. Gas 1, H220; Press. Gas (Comp.), H280	25-<50%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21-xxxx	propane Flam. Gas 1, H220; Press. Gas (Comp.), H280	10-<20%
EC number: 927-510-4 Reg.nr.: 01-2119475515-33-xxxx	Hydrocarbons, C7, n-alkanes, isoalkanes, cycloalkanes Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336	5-<10%
EC number: 921-024-6 Reg.nr.: 01-2119475514-35-xxxx	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cycloalkanes, < 5 % n-hexane ♦ Flam. Liq. 2, H225; ♦ Asp. Tox. 1, H304; ♦ Aquatic Chronic 2, H411; ♦ Skin Irrit. 2, H315; STOT SE 3, H336	5-<10%
CAS: 106-97-8 EINECS: 203-448-7 Reg.nr.: 01-2119474691-32-xxxx	butane Flam. Gas 1, H220; Press. Gas (Comp.), H280	5-<10%
CAS: 7440-50-8 EINECS: 231-159-6 Reg.nr.: 01-2119480154-42-xxxx	copper Acute Tox. 3, H331; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302; Eye Irrit. 2, H319	2.5-<5%
· Additional information: For the	wording of the listed hazard phrases refer to section 16.	

SECTION 4: First aid measures

- \cdot 4.1 Description of first aid measures
- · After inhalation:

Supply fresh air; consult doctor in case of complaints.

Take affected persons into fresh air and keep quiet.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

(Contd. on page 3)

Printing date 27.11.2018 Version number 42 Revision: 27.11.2018

Trade name: Kupferpastenspray

(Contd. of page 2)

Immediately remove any clothing soiled by the product.

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: Do not induce vomiting; call for medical help immediately.
- · 4.2 Most important symptoms and effects, both acute and delayed

Breathing difficulty

Headache

Dizziness

Dizziness

Coughing

Nausea

· 4.3 Indication of any immediate medical attention and special treatment needed

If swallowed or in case of vomiting, danger of entering the lungs.

Later observation for pneumonia and pulmonary oedema.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:

Foam

Fire-extinguishing powder

Carbon dioxide

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · 5.2 Special hazards arising from the substance or mixture

Can form explosive gas-air mixtures.

Formation of toxic gases is possible during heating or in case of fire.

- · 5.3 Advice for firefighters
- · **Protective equipment:** Wear self-contained respiratory protective device.
- · Additional information

Cool endangered receptacles with water spray.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources.

· 6.2 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.

· 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.

• **6.4 Reference to other sections** See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Avoid contact with skin and eyes.

(Contd. on page 4)

Printing date 27.11.2018 Version number 42 Revision: 27.11.2018

Trade name: Kupferpastenspray

(Contd. of page 3)

· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Pressurised 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.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Observe official regulations on storing packagings with pressurised containers.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Protect from heat and direct sunlight.
- · 7.3 Specific end use(s): Professional use

SECTION 8: Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.

· Ingredients with limit values that require monitoring at the workplace:			
CAS:	106-97-8 butane		
WEL	Short-term value: 1810 mg/m³, 750 ppm		
	Long-term value: 1450 mg/m³, 600 ppm		
	Carc (if more than 0.1% of buta-1.3-diene)		
CAS:	7440-50-8 copper		
WEL	Short-term value: 2** mg/m³		
	Long-term value: $0.2*1** mg/m^3$		
	*firme **dusts and mists (as Cu)		

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

- Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.
- · Recommended filter device for short term use: Filter AX
- · Protection of hands:

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

· Material of gloves

Nitrile rubber, NBR

(EN 374)

Recommended thickness of the material: ≥ 0.45 mm

· Penetration time of glove material

≥240 min

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

· Eye protection:



Tightly sealed goggles

(EN 166)

(Contd. on page 5)

Printing date 27.11.2018 Version number 42 Revision: 27.11.2018

Trade name: Kupferpastenspray

· Body protection:

Solvent resistant protective clothing

(EN 13034-6)

(Contd. of page 4)

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Aerosol

Colour: Copper coloured
Odour: Petrol-like
Odour threshold: Not determined.

pH-value: Not determined.

· Change in condition

Melting point/freezing point: Undetermined.

Initial boiling point and boiling range: < 0 °C

· Flash point: Not applicable, as aerosol.

· Flammability (solid, gas): Not applicable.

· Ignition temperature: >200 °C

• **Decomposition temperature:** Not determined.

· Auto-ignition temperature: Not determined.

• Explosive properties: Not determined.

· Explosion limits:

Lower: Not determined. Upper: Not determined.

· Vapour pressure: Not determined.

Density at 20 °C: 0.65421 g/cm³
 Relative density Not determined.
 Vapour density Not determined.

• Evaporation rate Not applicable.

· 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.Organic solvents:71.4 %VOC (EC)467.4 g/l

Solids content: 0.0 9

• **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

 \cdot 10.1 Reactivity No further relevant information available.

(Contd. on page 6)

Printing date 27.11.2018 Version number 42 Revision: 27.11.2018

Trade name: Kupferpastenspray

(Contd. of page 5)

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

Aldehyde

Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.

· LD/LC50	· LD/LC50 values relevant for classification:		
ATE (Acu	te Toxicity	y Estimates)	
Oral	LD50	14,028 mg/kg	
Inhalative	LC50/4 h	20.6 mg/l (rat)	

	CAS: 7440-50-8 copper		
Γ	Oral	LD50	500 mg/kg (ATE)
L	Inhalative	LC50/4 h	0.733 mg/l (rat)

- · Primary irritant effect:
- · Skin corrosion/irritation

Causes skin irritation.

- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- $\cdot \textbf{Respiratory or skin sensitisation} \ \text{Based on available data, the classification criteria are not met.} \\$
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard

May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark: Harmful to fish
- · Additional ecological information:
- · General notes:

Harmful to aquatic organisms

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.

(Contd. on page 7)



Printing date 27.11.2018 Version number 42 Revision: 27.11.2018

Trade name: Kupferpastenspray

(Contd. of page 6)

- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue	
16 05 04*	gases in pressure containers (including halons) containing hazardous substances
15 01 04	metallic packaging

- · Uncleaned packaging:
- **Recommendation:** Disposal must be made according to official regulations.

•	tion
14.1 UN-Number ADR/RID/ADN, IMDG, IATA	UN1950
14.2 UN proper shipping name ADR/RID/ADN	UN1950 AEROSOLS, ENVIRONMENTALI HAZARDOUS
IMDG IATA	AEROSOLS AEROSOLS, flammable
14.3 Transport hazard class(es)	
ADR/RID/ADN	
1 1 1 1 1 1 1 1 1 1	
Class	2 5F Gases.
Label	2.1
Close	2.1
· Class · Label	2.1
14.4 Packing group ADR/RID/ADN, IMDG, IATA	Void
14.5 Environmental hazards:	
Marine pollutant:	No
Special marking (ADR/RID/ADN):	Symbol (fish and tree)
• 14.6 Special precautions for user • Danger code (Kemler):	Warning: Gases.
· EMS Number:	F-D,S-U
· Stowage Code	SW1 Protected from sources of heat.
	SW22 For AEROSOLS with a maximum capacity o litre: Category A. For AEROSOLS with a capacity about 1 litre: Category B. For WASTE AEROSOLS: Category

Printing date 27.11.2018 Version number 42 Revision: 27.11.2018

Trade name: Kupferpastenspray

	(Contd. of page
· Segregation Code	C, Clear of living quarters. SG69 For AEROSOLS with a maximum capacity of litre: Segregation as for class 9. Stow "separated from class 1 except for division 1.4. For AEROSOLS with capacity above 1 litre: Segregation as for the appropriat subdivision of class 2. For WASTE AEROSOLS Segregation as for the appropriate subdivision of class 2.
· 14.7 Transport in bulk according to Ann Marpol and the IBC Code	nex II of Not applicable.
· Transport/Additional information:	
· ADR/RID/ADN	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· Transport category	2
· Tunnel restriction code	D
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0
	Not permitted as Excepted Quantity
· UN "Model Regulation":	UN 1950 AEROSOLS, 2.1, ENVIRONMENTALL HAZARDOUS

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- \cdot Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category

P3a FLAMMABLE AEROSOLS

E2 Hazardous to the Aquatic Environment

- · Qualifying quantity (tonnes) for the application of lower-tier requirements 150 t
- $\cdot \ \textbf{Qualifying quantity (tonnes) for the application of upper-tier requirements} \ 500 \ t \\$
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 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.

· Relevant phrases

H220 Extremely flammable gas.

H225 Highly flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H336 May cause drowsiness or dizziness.

(Contd. on page 9)



Printing date 27.11.2018 Version number 42 Revision: 27.11.2018

Trade name: Kupferpastenspray

(Contd. of page 8)

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

· Department issuing SDS: Product Safety department.

· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Gas 1: Flammable gases - Category 1

Aerosol 1: Aerosols - Category 1

Press. Gas (Comp.): Gases under pressure - Compressed gas

Flam. Liq. 2: Flammable liquids - Category 2

Acute Tox. 4: Acute toxicity - Category 4

Acute Tox. 3: Acute toxicity - Category 3

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard - Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2

* Data compared to the previous version altered.

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