

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**4645 Copper paste spray 400 ml**

Revision date: 11.02.2021

Product code: 94224

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

4645 Copper paste spray 400 ml

UFI: GJXD-C8KC-C008-WEA6

**1.2. Relevant identified uses of the substance or mixture and uses advised against****Use of the substance/mixture**

Lubricating agent

**1.3. Details of the supplier of the safety data sheet**

Company name:	KERONA GmbH	
Street:	Zeilbaumweg 15	
Place:	D-74613 Öhringen	
Telephone:	+49 7941-9205 4080	
e-mail:	mail@kerona.de	
Contact person:	Dr. Hans Goetz	Telephone: +49 170-8548 710
e-mail:	hans.goetz@kerona.de	
Internet:	www.kerona.de	

**1.4. Emergency telephone number:** Vergiftungs-Informations-Zentrale Freiburg  
+49 761-19 240

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Aerosol: Aerosol 1

Skin corrosion/irritation: Skin Irrit. 2

Hazardous to the aquatic environment: Aquatic Acute 1

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

Extremely flammable aerosol.

Pressurised container: May burst if heated.

Causes skin irritation.

Very toxic to aquatic life.

Toxic to aquatic life with long lasting effects.

**2.2. Label elements****Regulation (EC) No. 1272/2008****Hazard components for labelling**

Hydrocarbons C7 - n-alkanes - isoalkanes - cyclics

Hydrocarbons C6-C7 n-alkanes - isoalkanes - cyclics - &lt;5% n-hexane

Copper

**Signal word:** Danger**Pictograms:****Hazard statements**

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.

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H400 Very toxic to aquatic life.  
 H411 Toxic to aquatic life with long lasting effects.

#### Precautionary statements

P102 Keep out of reach of children.  
 P210 Keep away from heat. 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.

#### 2.3. Other hazards

Pressurised container: May burst if heated.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Chemical characterization

Mixture of substances listed below with nonhazardous components.

##### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
64742-49-0	Hydrocarbons C7 - n-alkanes - isoalkanes - cyclics			5 - 10 %
	927-510-4			
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H336 H304 H411			
64742-49-0	Hydrocarbons C6-C7 n-alkanes - isoalkanes - cyclics - <5% n-hexane			5 - 10 %
	921-024-6		01-2119475514-35	
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H336 H304 H411			
7440-50-8	Copper			2,5 - 5 %
	231-159-6			
	Acute Tox. 3, Acute Tox. 4, Eye Irrit. 2, Aquatic Acute 1, Aquatic Chronic 1; H331 H302 H319 H400 H410			

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

##### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
64742-49-0	927-510-4	Hydrocarbons C7 - n-alkanes - isoalkanes - cyclics	5 - 10 %
		inhalation: LC50 = >25,2 mg/l (vapours); dermal: LD50 = >2920 mg/kg; oral: LD50 = >5840 mg/kg	
64742-49-0	921-024-6	Hydrocarbons C6-C7 n-alkanes - isoalkanes - cyclics - <5% n-hexane	5 - 10 %
		inhalation: LC50 = >20 mg/l (vapours); dermal: LD50 = >2000 mg/kg; oral: LD50 = >5000 mg/kg	
7440-50-8	231-159-6	Copper	2,5 - 5 %
		inhalation: ATE = 3 mg/l (vapours); inhalation: ATE = 0,5 mg/l (dusts or mists); oral: LD50 = 500 mg/kg	

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Never give anything by mouth to an unconscious person or a person with cramps.

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#### **After inhalation**

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

#### **After contact with skin**

Wash with plenty of water. In case of skin irritation, consult a physician.

#### **After contact with eyes**

Rinse immediately carefully and thoroughly with eye-bath or water. In case of troubles or persistent symptoms, consult an ophthalmologist.

#### **After ingestion**

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Get immediate medical advice/attention.

#### **4.2. Most important symptoms and effects, both acute and delayed**

Vapours may cause drowsiness and dizziness. Frequently or prolonged contact with skin may cause dermal irritation.

#### **4.3. Indication of any immediate medical attention and special treatment needed**

No data available

### SECTION 5: Firefighting measures

#### **5.1. Extinguishing media**

##### **Suitable extinguishing media**

Carbon dioxide (CO<sub>2</sub>), Dry extinguishing powder, Foam.

##### **Unsuitable extinguishing media**

Full water jet.

#### **5.2. Special hazards arising from the substance or mixture**

In case of fire and/or explosion do not breathe fumes.

#### **5.3. Advice for firefighters**

Wear a self-contained breathing apparatus and chemical protective clothing.

#### **Additional information**

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

### SECTION 6: Accidental release measures

#### **6.1. Personal precautions, protective equipment and emergency procedures**

##### **General measures**

Remove all sources of ignition. Provide adequate ventilation.

#### **6.2. Environmental precautions**

Do not allow to enter into surface water or drains.

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

##### **Other information**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

#### **6.4. Reference to other sections**

See protective measures under point 7 and 8.

### SECTION 7: Handling and storage

#### **7.1. Precautions for safe handling**

##### **Advice on safe handling**

Use only in well-ventilated areas. Keep away from sources of ignition - No smoking. Flammable vapours can

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accumulate in head space of closed systems. Caution! Transport usually takes place at temperatures above the flash point.

#### Advice on protection against fire and explosion

Take precautionary measures against static discharges. Vapours can form explosive mixtures with air.

#### Further information on handling

When using do not eat, drink or smoke. Keep away from food, drink and animal feedingstuffs.

#### 7.2. Conditions for safe storage, including any incompatibilities

##### Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

##### Hints on joint storage

Do not store together with: Material, oxygen-rich, Oxidising, Pyrophoric or self-heating substances.

##### Further information on storage conditions

Keep away from heat.

#### 7.3. Specific end use(s)

No further relevant information available.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL
7440-50-8	Copper, dusts and mists (as Cu)	-	1		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL

##### DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
64742-49-0	Hydrocarbons C7 - n-alkanes - isoalkanes - cyclics			

#### 8.2. Exposure controls



##### Appropriate engineering controls

Provide adequate ventilation as well as local exhaust at critical locations.

##### Protective and hygiene measures

Remove contaminated, saturated clothing immediately. After work, wash hands and face. When using do not eat or drink.

##### Eye/face protection

Suitable eye protection: goggles  
DIN EN 166

##### Hand protection

Tested protective gloves must be worn.

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Suitable material: NBR (Nitrile rubber).

Thickness of the glove material > 0,45mm

penetration time (maximum wearing period): > 240 min. EN ISO 374

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

#### Skin protection

Wear suitable protective clothing. The type of personal protection equipment has to be chosen based on the concentration and amount of the dangerous substance at the workplace.

#### Respiratory protection

Work in well-ventilated zones or use proper respiratory protection. Filtering device with filter or ventilator filtering device of type: A (EN 14387)

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state:	Aerosol
Colour:	copper
Odour:	characteristic
pH-Value:	not applicable

#### Changes in the physical state

Melting point:	not determined
Boiling point or initial boiling point and boiling range:	< 0 °C
Flash point:	<0 °C

#### Explosive properties

Vapours can form explosive mixtures with air.

Lower explosion limits:	0,8 vol. %
Upper explosion limits:	9,4 vol. %
Auto-ignition temperature:	200 °C
Density (at 20 °C):	0,655 g/cm <sup>3</sup>
Water solubility:	Immiscible
Solvent content:	71,4%

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Oxidising agent, strong

### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

### 10.3. Possibility of hazardous reactions

Oxidising agent, strong

### 10.4. Conditions to avoid

This material is combustible and can be ignited by heat, sparks, flames, or other sources of ignition (e.g. static electricity, pilot lights, or mechanical/electrical equipment).

The product is chemically stable under recommended conditions of storage, use and temperature.

### 10.5. Incompatible materials

Reacts with : Oxidising agent, strong

### 10.6. Hazardous decomposition products

Carbon dioxide (CO<sub>2</sub>), Carbon monoxide

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#### SECTION 11: Toxicological information

##### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

###### Toxicokinetics, metabolism and distribution

No data available

###### Acute toxicity

Based on available data, the classification criteria are not met.

###### ATEmix tested

	Dose	Species	Source
LD50, oral	14028 mg/kg		
LC50, inhalation (vapour) (4 h)	14 mg/l		

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
64742-49-0	Hydrocarbons C7 - n-alkanes - isoalkanes - cyclics				
	oral	LD50 >5840 mg/kg	Rat		
	dermal	LD50 >2920 mg/kg	Rat		
	inhalation (4 h) vapour	LC50 >25,2 mg/l	Rat		
64742-49-0	Hydrocarbons C6-C7 n-alkanes - isoalkanes - cyclics - <5% n-hexane				
	oral	LD50 >5000 mg/kg	Rat		OECD 401
	dermal	LD50 >2000 mg/kg	Rat		OECD 402
	inhalation (4 h) vapour	LC50 >20 mg/l	Rat		OECD 403
7440-50-8	Copper				
	oral	LD50 500 mg/kg			
	inhalation vapour	ATE 3 mg/l			
	inhalation aerosol	ATE 0,5 mg/l			

###### Irritation and corrosivity

Causes skin irritation.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

###### Sensitising effects

Based on available data, the classification criteria are not met.

###### Carcinogenic/mutagenic/toxic effects for reproduction

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

Based on available data, the classification criteria are not met.

###### Specific effects in experiment on an animal

No data available

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#### Additional information on tests

No data available

#### Practical experience

May be harmful if swallowed, in contact with skin or if inhaled.

## SECTION 12: Ecological information

### 12.1. Toxicity

Do not allow to enter into surface water or drains.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 12.2. Persistence and degradability

No data available

### 12.3. Bioaccumulative potential

No data available

### 12.4. Mobility in soil

Product is easily volatile.

### 12.5. Results of PBT and vPvB assessment

No data available

### 12.7. Other adverse effects

No data available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

#### List of Wastes Code - residues/unused products

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

#### List of Wastes Code - used product

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

#### List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

#### Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

## SECTION 14: Transport information

### Land transport (ADR/RID)

<b>14.1. UN number:</b>	UN 1950
<b>14.2. UN proper shipping name:</b>	AEROSOLS
<b>14.3. Transport hazard class(es):</b>	2
<b>14.4. Packing group:</b>	-
Hazard label:	2.1

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Classification code: 5F  
 Special Provisions: 190 327 344 625  
 Limited quantity: 1 L  
 Excepted quantity: E0  
 Transport category: 2  
 Tunnel restriction code: D

**Inland waterways transport (ADN)**

**14.1. UN number:** UN 1950  
**14.2. UN proper shipping name:** AEROSOLS  
**14.3. Transport hazard class(es):** 2  
**14.4. Packing group:** -  
 Hazard label: 2.1



Classification code: 5F  
 Special Provisions: 190 327 344 625  
 Limited quantity: 1 L  
 Excepted quantity: E0

**Marine transport (IMDG)**

**14.1. UN number:** UN 1950  
**14.2. UN proper shipping name:** AEROSOLS  
**14.3. Transport hazard class(es):** 2.1  
**14.4. Packing group:** -  
 Hazard label: 2.1



Special Provisions: 63, 190, 277, 327, 344, 959  
 Limited quantity: 1000 mL  
 Excepted quantity: E0  
 EmS: F-D, S-U

**Air transport (ICAO-TI/IATA-DGR)**

**14.1. UN number:** UN 1950  
**14.2. UN proper shipping name:** AEROSOLS  
**14.3. Transport hazard class(es):** 2.1  
**14.4. Packing group:** -  
 Hazard label: 2.1



Special Provisions: A145 A167 A802  
 Limited quantity Passenger: 30 kg G  
 Passenger LQ: Y203  
 Excepted quantity: E0



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IATA-packing instructions - Passenger:	203
IATA-max. quantity - Passenger:	75 kg
IATA-packing instructions - Cargo:	203
IATA-max. quantity - Cargo:	150 kg

#### SECTION 15: Regulatory information

##### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

###### EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 29

2010/75/EU (VOC): 71,4% (467,4 g/L)

###### National regulatory information

Water hazard class (D): 2 - obviously hazardous to water

##### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

#### SECTION 16: Other information

##### **Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]**

Classification	Classification procedure
Aerosol 1; H222-H229	On basis of test data
Skin Irrit. 2; H315	Bridging principle "Aerosols"
Aquatic Acute 1; H400	
Aquatic Chronic 2; H411	Calculation method

##### **Relevant H and EUH statements (number and full text)**

H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst 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.
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.

##### **Further Information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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**Identified uses**

No	Short title	LCS	SU	PC	PROC	ERC	AC	TF	Specification
1	Oberflächenbehandlung	-	-	14	-	-	-	-	3
2	Lubricating agent	PW, C	-	24	11	-	-	7, 80	

LCS: Life cycle stages

PC: Product categories

ERC: Environmental release categories

TF: Technical functions

SU: Sectors of use

PROC: Process categories

AC: Article categories

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*