

COPPER SPRAY

Creation date 22. January 2019
Revision date Version 2.0

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

- 1.1. Product identifier** COPPER SPRAY
Substance / mixture mixture
Number 1 35006
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**
mixture's intended use Grease.

The use descriptors

SU 3 Industrial uses: Uses of substances as such or in preparations* at industrial sites
SU 22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
PROC 7 Industrial spraying
PROC 11 Non industrial spraying

Mixture uses advised against For professional use only.

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

Name or trade name RETECH, s.r.o.
Address Vackova 1541/4, Praha 5 - Stodůlky, 155 00
Czech Republic
Identification number (CRN) 25018205
Phone +420327596428
E-mail info@retech.cz
Web address www.retech.com

Competent person responsible for the safety data sheet

Name RETECH, s.r.o.
E-mail info@retech.cz

1.4. Emergency telephone number

RETECH, Suchdol 212, 285 02 Suchdol u Kutné Hory, Czech Republic; Telephone number: +420 327 596 128 (7.30-16.00 hour)
Poisoning information centre, Na Bojišti 1, Praha, Czech Republic, Tel.: non-stop +420 224 919 293 or +420 224 915 402, Information on health risks only - acute poisoning of humans and animals.

SECTION 2: Hazards identification**2.1. Substance or mixture classification****Classification of the mixture in accordance with Regulation (EC) No 1272/2008**

The mixture is classified as dangerous.

Aerosol 1, H222, H229
Asp. Tox. 1, H304
Skin Irrit. 2, H315
STOT SE 3, H336
Aquatic Chronic 2, H411

Full text of all classifications and hazard statements is given in the section 16.

Most serious adverse physico-chemical effects

Extremely flammable aerosol. Pressurised container: May burst if heated.

Most serious adverse effects on human health and the environment

May be fatal if swallowed and enters airways. Causes skin irritation. May cause drowsiness or dizziness. Toxic to aquatic life with long lasting effects.

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2.2. Label elements

Hazard pictogram



Signal word

Danger

Hazardous substances

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Hazard statements

- H222 Extremely flammable aerosol.
- H229 Pressurised container: May burst if heated.
- H315 Causes skin irritation.
- H336 May cause drowsiness or dizziness.
- H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

- 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.
- P260 Do not breathe spray.
- P271 Use only outdoors or in a well-ventilated area.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/eye protection.
- P301+P310 IF SWALLOWED: Immediately call a doctor.
- P302+P352 IF ON SKIN: Wash with plenty of water and soap.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P331 Do NOT induce vomiting.
- P403 Store in a well-ventilated place.
- P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
- P501 Dispose of contents/container to in accordance with national regulations.

Supplemental information

2.3. Other hazards

Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture of substances and additives specified below.

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note.
EC: 921-024-6 Registration number: 01-2119475514-35	hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	25-<50	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 2, H411	

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Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note.
CAS: 106-97-8 EC: 203-448-7 Registration number: 01-2119474691-32	butane (containing < 0,1 % butadiene (203-450-8))	10-<25	Flam. Gas 1, H220 Press. Gas, H280	
CAS: 74-98-6 EC: 200-827-9 Registration number: 01-2119486944-21	propane	10-<25	Flam. Gas 1, H220 Press. Gas (compressed gas), H280	
CAS: 7440-50-8 EC: 231-159-6 Registration number: 01-2119480154-42	copper	2,5-<10	Acute Tox. 4, H302 Aquatic Acute 1, H400 Aquatic Chronic 2, H411	
CAS: 61788-45-2 EC: 262-976-6	amines, hydrogenated tallow alkyl	0,025-<0,1	Asp. Tox. 1, H304 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT RE 2, H373 Aquatic Acute 1, H400, M=10 Aquatic Chronic 1, H410, M=10	

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet.

Inhalation

Transfer the affected person to the fresh air and ensure calm environment for body and mind. In the event of issues, find medical advice. In case of unconsciousness place patient stably in side position for transportation.

Skin contact

Immediately wash with water and soap and rinse thoroughly.

Eye contact

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. In the event of issues, find medical advice.

Ingestion

DO NOT INDUCE VOMITING! Provide medical treatment.

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

Inhalation

May cause drowsiness or dizziness.

Skin contact

Causes skin irritation.

Eye contact

When intruding eyes, it can evoke irritation.

Ingestion

not available

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

not available

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media

Water - full jet.

5.2. Special hazards arising from the substance or mixture

not available

5.3. Advice for firefighters

Use a self-contained breathing apparatus and full-body protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide sufficient ventilation. Use personal protective equipment for work. Keep unprotected persons away.

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.

6.3. Methods and material for containment and cleaning up

Provide sufficient ventilation. Do not flush with water or aqueous cleansing agents. Dispose of the collected material according to the instructions in the section 13.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care. Do not spray on an open flame or other ignition source. The product should be used only in the areas where it is not in contact with open fire and other ignition sources. No smoking. Take precautionary measures against static discharge. Pressurised container: May burst if heated. Keep away from sources of heating, ignition and direct sunlight. Do not pierce or burn, even after use.

7.2. Conditions for safe storage, including any incompatibilities

Keep cool. Observe official regulations on storing packagings with pressurized containers.

Storage class 2B - Aerosols

The specific requirements or rules relating to the substance/mixture

Store in tightly closed containers in a cool, dry place intended for this purpose. Keep away from sources of heating, ignition and direct sunlight.

7.3. Specific end use(s)

not available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

United Kingdom of Great Britain and Northern Ireland

Substance name (component)	Type	Time of exposure	Value	Note	Source
butane (containing < 0,1 % butadiene (203-450-8)) (CAS: 106-97-8)	WEL	8 hours	600 ppm		GBR
	WEL	8 hours	1450 mg/m ³		

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United Kingdom of Great Britain and Northern Ireland

Substance name (component)	Type	Time of exposure	Value	Note	Source
butane (containing < 0,1 % butadiene (203-450-8)) (CAS: 106-97-8)	WEL	15 minutes	1810 mg/m ³		GBR
	WEL	15 minutes	750 ppm		
copper (CAS: 7440-50-8)	WEL	8 hours	0,2 mg/m ³		GBR
	WEL	8 hours	1 mg/m ³	Dust and fume, As Cu	
	WEL	15 minutes	2 mg/m ³	Dust and fume, As Cu	

DNEL

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Workers / consumers	Route of exposure	Value	Effect	Determining method
Consumers	Oral	699 mg/kg bw/day	Systemic chronic effects	
Consumers	Dermal	699 mg/kg bw/day	Systemic chronic effects	
Workers	Dermal	773 mg/kg bw/day	Systemic chronic effects	
Consumers	Inhalation	608 mg/m ³	Systemic chronic effects	
Workers	Inhalation	2035 mg/m ³	Systemic chronic effects	

8.2. Exposure controls

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.

Eye/face protection

Tightly sealed goggles.

Skin protection

Hand protection: Protective gloves resistant to the product. The final selection of the glove material must be carried out on the basis of penetration times, permeation rates and degradation. Material of gloves: Nitrile rubber, NBR. Recommended thickness of the material: ≥ 0.5 mm. Penetration time of glove material: > 480 min. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Other protection: protective workwear.

Respiratory protection

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device. Filter AX/P2.

Thermal hazard

Not available.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2.

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SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance	aerosol
Physical state	liquid at 20°C
color	copper
Odour	after solvents
Odour threshold	data not available
pH	data not available
Melting point/freezing point	data not available
Initial boiling point and boiling range	-44.5 °C
Flash point	-97 °C
Evaporation rate	data not available
Flammability (solid, gas)	Extremely flammable aerosol.
Upper/lower flammability or explosive limits	
flammability limits	data not available
explosive limits	
bottom	0.8 %
upper	10.9 %
Vapour pressure	8300 hPa at 20 °C
Vapour density	data not available
Relative density	data not available
Solubility(ies)	
solubility in water	almost insoluble
solubility in fats	data not available
Partition coefficient: n-octanol/water	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
Viscosity	data not available
Explosive properties	The product does not have explosive properties but can be explosive when blended with air.
Oxidising properties	data not available
data not available	

9.2. Other information

Density	0.72 g/cm ³ at 20 °C
ignition temperature	>200 °C
content of organic solvents (VOC)	65.0 %
solid content (dry matter)	34.7 % volume
Max. VOC content in the product in its ready to use condition	468.7 g/l
Product is not selfigniting.	

SECTION 10: Stability and reactivity**10.1. Reactivity**

not available

10.2. Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

10.3. Possibility of hazardous reactions

Unknown.

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10.4. Conditions to avoid

not available

10.5. Incompatible materials

not available

10.6. Hazardous decomposition products

Unknown.

SECTION 11: Toxicological information**11.1. Information on toxicological effects**

No toxicological data is available for the mixture.

Acute toxicity

Based on available data the classification criteria are not met.

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD ₅₀	>5840 mg/kg		Rat	
Dermal	LD ₅₀	>2920 mg/kg		Rat	
Inhalation	LC ₅₀	>25 mg/l	4 hour	Rat	

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Based on available data the classification criteria are not met.

Respiratory or skin sensitisation

Based on available data the classification criteria are not met.

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.

Toxicity for specific target organ - single exposure

May cause drowsiness or dizziness.

Toxicity for specific target organ - 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**

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Acute toxicity

Toxic to aquatic life with long lasting effects.

copper

Parameter	Value	Time of exposure	Species	Environment
EC ₅₀	0.0426-0.0535 mg/l	72 hour	Algae (Pseudokirchneriella subcapitata)	
EC ₅₀	0.031-0.054 mg/l	96 hour	Algae (Pseudokirchneriella subcapitata)	
LC ₅₀	0.0068-0.0156 mg/l	72 hour	Fishes (Pimephales promelas)	

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Parameter	Value	Time of exposure	Species	Environment
LL ₅₀	11.4 mg/l	96 hour	Fishes (Oncorhynchus mykiss)	
EL ₅₀	3 mg/l	48 hour	Invertebrates (Daphnia magna)	
LOEC	0.32 mg/l	21 day	Invertebrates (Daphnia magna)	
NOEC	0.17 mg/l	21 day	Invertebrates (Daphnia magna)	
EL ₅₀	30-100 mg/l	72 hour	Algae (Pseudokirchneriella subcapitata)	
NOELR	3 mg/l	72 hour	Algae (Pseudokirchneriella subcapitata)	

12.2. Persistence and degradability

Data not available.

12.3. Bioaccumulative potential

Not available.

12.4. Mobility in soil

Not available.

12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Other adverse effects

Ecotoxicological effects: Remark: Toxic for fish

Additional ecological information:

General notes: 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. Also poisonous for fish and plankton in water bodies. Toxic for aquatic organisms.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste.

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Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

Waste type code

16 03 05 organic wastes containing dangerous substances

Packaging waste type code

15 01 11 metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers

SECTION 14: Transport information**14.1. UN number**

UN 1950

14.2. UN proper shipping name

AEROSOLS

14.3. Transport hazard class(es)

2 Gases

14.4. Packing group

not available

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS. Product contains environmentally hazardous substances: Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

14.6. Special precautions for user

Reference in the Sections 4 to 8.

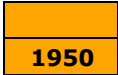
14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not available

Additional information

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.

Hazard identification No.

 (Kemler Code)

UN number

5F

Classification code

2.1+dangerous for the environment

Safety signs

**Road transport - ADR**

Limited quantities

1L

Tunnel restriction code

(D)

Marine transport - IMDG

Hazard initiator

Naphtha (petroleum) hydrotreated light, n-Phenyl Benzamide Derivates

EmS (emergency plan)

F-D, S-U

Marine Pollutant

Yes

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SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended.

15.2. Chemical safety assessment

not available

SECTION 16: Other information**A list of standard risk phrases used in the safety data sheet**

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.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
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.

Guidelines for safe handling used in the safety data sheet

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251	Do not pierce or burn, even after use.
P260	Do not breathe spray.
P211	Do not spray on an open flame or other ignition source.
P280	Wear protective gloves/eye protection.
P273	Avoid release to the environment.
P271	Use only outdoors or in a well-ventilated area.
P301+P310	IF SWALLOWED: Immediately call a doctor.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P331	Do NOT induce vomiting.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P403	Store in a well-ventilated place.
P501	Dispose of contents/container in accordance with national regulations.

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service

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CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
DNEL	Derived no-effect level
EC	Identification code for each substance listed in EINECS
EC ₅₀	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
IC ₅₀	Concentration causing 50% blockade
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC ₅₀	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD ₅₀	Lethal dose of a substance in which it can be expected death of 50% of the population
LOAEC	Lowest observed adverse effect concentration
LOAEL	Lowest observed adverse effect level
log Kow	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution From Ships
NOAEC	No observed adverse effect concentration
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
NOEL	No observed effect level
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted no-effect concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative
Acute Tox.	Acute toxicity
Aerosol	Aerosol
Aquatic Acute	Hazardous to the aquatic environment
Aquatic Chronic	Hazardous to the aquatic environment
Asp. Tox.	Aspiration hazard
Eye Dam.	Serious eye damage
Flam. Gas	Flammable gas
Flam. Liq.	Flammable liquid
Press. Gas	Gases under pressure
Skin Irrit.	Skin irritation
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure

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Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

The changes (which information has been added, deleted or modified)

2, 3, 8, 11, 12, 15, 16

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.