SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

COPPER SPRAY

Creation date	16th July 2024		
Revision date		Version	3.1

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

1.1. Product identifier COPPER SPRAY

Substance / mixture	mixture
Number	1 35006
UFI	JVYK-6V4X-3300-0A36

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

Mixture's intended use

Grease. For professional use only.

Main intended use

PC-TEC-11 Lubricants, greases, release agents

Mixture uses advised against

The product should not be used in ways other than those referred in Section 1.

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
VAT Reg No	CZ25018205
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

European emergency number: 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification of the mixture in accordance with Regulation (EC) No 1272/2008

The mixture is classified as dangerous.

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

Most serious adverse physico-chemical effects

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

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.

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 dust/fume/gas/mist/vapours/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 POISON CENTER/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.
P410+P412	Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122 °F.

2.3. Other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. 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	
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 1A, H220 Press. Gas (compressed gas), H280	
CAS: 74-98-6 EC: 200-827-9 Registration number: 01-2119486944-21	propane	10-<25	Flam. Gas 1A, H220 Press. Gas (compressed gas), H280	
CAS: 75-28-5 EC: 200-857-2 Registration number: 01-2119485395-27	isobutane	2,5-<10	Flam. Gas 1A, 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 Eye Irrit. 2, H319 Acute Tox. 3, H331 Aquatic Chronic 1, H410	

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.

If inhaled

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

If on skin

Immediately wash with water and soap and rinse thoroughly.

If in eyes

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.

If swallowed

DO NOT INDUCE VOMITING! Provide medical treatment.

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

If inhaled

May cause drowsiness or dizziness.

If on skin

Causes skin irritation.

If in eyes

not available

If swallowed

not available

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

not available

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

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

Content	Packaging type	Material of package
400 ml	aerosol can	FE

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.

DNEL

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane					
Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Consumers	Oral	699 mg/kg bw/day	Chronic effects systemic		
Consumers	Dermal	699 mg/kg bw/day	Chronic effects systemic		
Workers	Dermal	773 mg/kg bw/day	Chronic effects systemic		
Consumers	Inhalation	608 mg/m³	Chronic effects systemic		
Workers	Inhalation	2035 mg/m³	Chronic effects systemic		

PNEC

copper			
Route of exposure	Value	Value determination	Source
Freshwater environment	0.0078 mg/l		
Marine water	0.0052 mg/l		
Freshwater sediment	87 mg/kg of dry substance of sediment		
Microorganisms in sewage treatment	0.23 mg/l		
Sea sediments	676 mg/kg of dry substance of sediment		

8.2. Exposure controls

Do not store together with food, drink and animal feed. Take off contaminated clothing. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest. Do not inhale gases and vapours. Do not inhale aerosols. Prevent contact with skin and eyes.

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 trough 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 inadequate ventilation wear respiratory protection. Filter A2/P2.

Thermal hazard

Not available.

Environmental exposure controls

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	gas
Colour	brown
Odour	characteristic
Melting point/freezing point	data not available
Boiling point or initial boiling point and boiling range	-44.5 °C
Flammability	Extremely flammable aerosol.
Lower and upper explosion limit	
bottom	0.8 %
butane (containing < 0,1 % butadiene (203-450-8)) (CAS: 106-97-8)	1.5 %
upper	10.9 %
Flash point	-97 °C
Auto-ignition temperature	data not available
butane (containing < 0,1 % butadiene (203-450-8)) (CAS: 106-97-8)	365 °C
Decomposition temperature	data not available
pH	non-polar/aprotic
Kinematic viscosity	data not available
Solubility in water	almost insoluble
Solubility in fats	data not available
Partition coefficient n-octanol/water (log value)	data not available
Vapour pressure	3800 hPa at 20 °C
Density and/or relative density	
Density	0.714 g/cm³ at 20 °C
Relative vapour density	data not available
Particle characteristics	data not available
Form	aerosol dispenser: spray aerosol

data not available

9.2. Other information

Evaporation rate	data not available
Ignition temperature	>200 °C
Explosive properties	The product does not have explosive properties but can be explosive when blended with air.
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	464.1 g/l
Product is not selfigniting.	

SECTION 10: Stability and reactivity

10.1. Reactivity
not available

10.2. Chemical stability
The product is stable under normal conditions.

10.3. Possibility of hazardous reactions
Unknown.

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 hazard classes as defined in Regulation (EC) No 1272/2008
No toxicological data is available for the mixture.

Acute toxicity
Data for the mixture are not available. Based on the available data, the criteria for classification of the mixture are not met.

copper					
Route of exposure	Parameter	Value	Exposure time	Species	Sex
Oral	LD_{50}	300-2500 mg/kg		Rat	
Oral	NOAEL	16.7 mg/kg/24h		Rat	
Dermal	LD_{50}	>2000 mg/kg		Rat	
Inhalation	LC_{50}	5.11 mg/l	4 hours	Rat	

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane					
Route of exposure	Parameter	Value	Exposure time	Species	Sex
Oral	LD_{50}	>5840 mg/kg		Rat	
Dermal	LD_{50}	>2920 mg/kg		Rabbit	
Inhalation	LC_{50}	>25 mg/l	4 hours	Rat	

Skin corrosion/irritation
Causes skin irritation. Data for the components of the mixture are not available.

Serious eye damage/irritation
No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Respiratory or skin sensitisation
No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Germ cell mutagenicity
No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Carcinogenicity
No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Reproductive toxicity
No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Toxicity for specific target organ - single exposure
May cause drowsiness or dizziness. Data for the components of the mixture are not available.

Toxicity for specific target organ - repeated exposure
No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Aspiration hazard
May be fatal if swallowed and enters airways. Data for the components of the mixture are not available.

11.2. Information on other hazards
The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 12: Ecological information

12.1. Toxicity
Toxic to aquatic life with long lasting effects.

Acute toxicity

copper				
Parameter	Value	Exposure time	Species	Environment
LC_{50}	11 mg/l	96 hours	Fish	

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane				
Parameter	Value	Exposure time	Species	Environment
LL_{50}	11.4 mg/l	96 hours	Fish (Oncorhynchus mykiss)	
EL_{50}	3 mg/l	48 hours	Invertebrates (Daphnia magna)	
EL_{50}	30-100 mg/l	72 hours	Algae (Pseudokirchneriella subcapitata)	

Chronic toxicity

copper				
Parameter	Value	Exposure time	Species	Environment
NOEC	11 mg/l	96 hours	Fish	

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane				
Parameter	Value	Exposure time	Species	Environment
LOEC	0.32 mg/l	21 days	Invertebrates (Daphnia magna)	
NOEC	0.17 mg/l	21 days	Invertebrates (Daphnia magna)	

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane				
Parameter	Value	Exposure time	Species	Environment
NOELR	3 mg/l	72 hours	Algae (Pseudokirchneriella subcapitata)	

12.2. Persistence and degradability

No data are available for either the mixture or the components.

12.3. Bioaccumulative potential

No data are available for either the mixture or the components.

12.4. Mobility in soil

No data are available for either the mixture or the components.

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. Endocrine disrupting properties

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

Ecotoxical 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. Not available.

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. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification.
HP3 "Flammable".
HP 4 'Irritant — skin irritation and eye damage'.
HP 5 'Specific Target Organ Toxicity (STOT)/Aspiration Toxicity'.
HP 14 'Ecotoxic'.

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 hazardous substances

Packaging waste type code

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

(*) - Hazardous waste according to Directive 2008/98/EC on hazardous waste

---

SECTION 14: Transport information

14.1. UN number or ID number

UN 1950

14.2. UN proper shipping name

AEROSOLS

14.3. Transport hazard class(es)

2 Gases

14.4. Packing group

not relevant

14.5. Environmental hazards

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. Maritime transport in bulk according to IMO instruments

not relevant

Additional information

Stowage Code: SW1 Protected from sources of heat. SW2 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.	
UN number	1950
Classification code	5F
Safety signs	2.1+hazardous for the environment

Road transport - ADR

Limited quantities	1L
Excepted quantities	E0
Tunnel restriction code	(D)

Railway transport - RID

Marine transport - IMDG

Hazard initiator	Hydrocarbons, C6-C7; copper; amines, hydrogenated tallow alkyl
EmS (emergency plan)	F-D, S-U
Marine pollutant	Yes

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 as amended. Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

More information

Directive 2012/18/EU of the European parliament and of the Council - ANNEX I - Hazard categories: P3a FLAMMABLE AEROSOLS. E2 Hazardous to the Aquatic Environment in Category Chronic 2.
Qualifying quantity (tonnes) of dangerous substances for the application - of lower-tier requirements: 150 (net).
Qualifying quantity (tonnes) of dangerous substances for the application of - upper-tier requirements: 500 (net).

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.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H336	May cause drowsiness or dizziness.
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.
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 dust/fume/gas/mist/vapours/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 POISON CENTER/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.
P410+P412	Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122 °F.

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
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
EC	Identification code for each substance listed in EINECS
EINECS	European Inventory of Existing Commercial Chemical Substances
EL_{50}	Effective Loading for 50% of the tested organisms
EmS	Emergency plan
EU	European Union
EuPCS	European Product Categorisation System
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
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
LL_{50}	Lethal Loading for 50% of tested organisms
log Kow	Octanol-water partition coefficient
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration

NOEL	No observed effect level
NOELR	No Observed Effect Loading Rate
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
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 Chronic	Hazardous to the aquatic environment (chronic)
Asp. Tox.	Aspiration hazard
Eye Irrit.	Eye irritation
Flam. Gas	Flammable gas
Flam. Liq.	Flammable liquid
Press. Gas	Gases under pressure
Skin Irrit.	Skin irritation
STOT SE	Specific target organ toxicity - single exposure

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)

The version 3.1 replaces the SDS version from 27 January 2021. Changes were made in sections 1, 2, 8, 11, 12, 13, 15 and 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.