

EMR Protect

Version 3.0

Revision Date 11.12.2019

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

Trade name : EMR Protect
Material number : 025540GK0

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

This information is not available.

1.3 Details of the supplier of the safety data sheet

Company :

Telephone :
Telefax :
E-mail address : msds.eckart@altana.com
Responsible/issuing person

1.4 Emergency telephone number**NCEC:**

(contract no.: ECKART29003-NCEC)

+44 1235 239671 (Middle East/Africa, call and response in your language)

+1 215 207 0061 (Americas, call and response in your language)

+65 3158 1074 (Asia-Pacific, call and response in your language)

SECTION 2: Hazards identification**GHS Classification**

: Acute toxicity, Category 4, Oral, H302
Serious eye damage/eye irritation, Category 2A, H319
Short-term (acute) aquatic hazard, Category 1, H400

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Long-term (chronic) aquatic hazard, Category 1, H410

GHS-Labeling

Symbol(s)



Signal word

: Warning

Hazard statements

: H302: Harmful if swallowed.
H319: Causes serious eye irritation.
H410: Very toxic to aquatic life with long lasting effects.

Precautionary statements

: **Prevention:**
P264 Wash skin thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear eye protection/ face protection.
Response:
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P391 Collect spillage.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label

Identification
copper

CAS-No.
7440-50-8

Other hazards which do not result in classification

Combustible Solids

SECTION 3: Composition/information on ingredients

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Substance No. :

Hazardous components

Chemical name	CAS-No. EINECS-No.	Classification and labelling	Concentration[%]
Copper	7440-50-8 231-159-6	Acute Tox.;4;H302 ;2A;H319 Aquatic Acute;1;H400 Aquatic Chronic;1;H410	50 - 100
silver	7440-22-4 231-131-3	Aquatic Acute;1;H400 Aquatic Chronic;1;H410	10 - 20

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures
4.1 Description of first aid measures

- General advice : Move the victim to fresh air.
- Do not leave the victim unattended.
- Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
- If inhaled : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : Wash off immediately with soap and plenty of water.

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- In case of eye contact : Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

This information is not available.

4.3 Indication of any immediate medical attention and special treatment needed

This information is not available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Special powder against metal fire, Dry sand, ABC powder
- Unsuitable extinguishing media : Water, High volume water jet

5.2 Special hazards arising from the substance or mixture

- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

5.3 Advice for firefighters

- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.
- Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Personal precautions : Use personal protective equipment.
Evacuate personnel to safe areas.
Use personal protective equipment.
Avoid dust formation.
Avoid breathing dust.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Use mechanical handling equipment.

Pick up and transfer to properly labelled containers.

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

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For personal protection see section 8.

SECTION 7: Handling and storage
7.1 Precautions for safe handling

Advice on safe handling : Avoid creating dust. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.

Avoid formation of respirable particles. Do not breathe vapours/dust. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Avoid dust formation.

Hygiene measures : General industrial hygiene practice. Do not smoke. Wash hands before breaks and at the end of workday. Keep away from food and drink. Keep away from tobacco products.

When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Electrical installations / working materials must comply with the technological safety standards.

Keep away from sources of ignition - No smoking. Do not store near combustible materials. Keep containers tightly closed in a cool, well-ventilated place. To maintain product quality, do not store in heat or direct sunlight.

Keep container tightly closed in a dry and well-ventilated place. Electrical installations / working materials must comply

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with the technological safety standards.

Further information on storage conditions	: Protect from humidity and water.
Advice on common storage	: Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. Do not store together with oxidizing and self-igniting products.
Dampness	: Keep in a dry, cool and well-ventilated place.
Other data	: Keep in a dry place. No decomposition if stored and applied as directed.

7.3 Specific end use(s)

This information is not available.

SECTION 8: Exposure controls/personal protection
8.1 Control parameters
Germany:

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
Copper	7440-50-8	AGW (inhalable fraction)	1 mg/m ³		DE TRGS 900
silver	7440-22-4	TWA	0,1 mg/m ³	2000-06-16	2000/39/EC
Further information		Indicative			
silver	7440-22-4	AGW (Inhalable fraction)	0,1 mg/m ³	2006-01-01	DE TRGS 900
Peak-limit: excursion factor (category)		8;(II)			
Further information		Senate commission for the review of compounds at the work			

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		place dangerous for the health (MAK-commission).European Union (The EU has established a limit value: deviations in value and peak limit are possible)			
silver	7440-22-4	TWA	0,01 mg/m3	2006-02-09	2006/15/EC
Further information		Indicative			

United States of America (USA):

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
Copper	7440-50-8	TWA	1 mg/m3	2008-01-01	
Copper	7440-50-8	TWA (dust and mists)	1 mg/m3	2005-09-01	
Copper	7440-50-8	TWA	1 mg/m3	1989-01-19	
Copper	7440-50-8	TWA	0,2 mg/m3	2008-01-01	
Copper	7440-50-8	TWA	0,1 mg/m3	1989-01-19	
Copper	7440-50-8	TWA (Dust and mist)	1 mg/m3	2010-03-01	
Copper	7440-50-8	TWA (Fumes)	0,2 mg/m3	2010-03-01	
Copper	7440-50-8	TWA (Dust)	1 mg/m3	2013-10-08	
Copper	7440-50-8	TWA (Mist)	1 mg/m3	2013-10-08	
Copper	7440-50-8	TWA (dusts and mists)	1 mg/m3	2011-07-01	
Copper	7440-50-8	TWA (Fumes)	0,1 mg/m3	2011-07-01	
Copper	7440-50-8	TWA (Fumes)	0,1 mg/m3	1989-01-19	
Copper	7440-50-8	TWA (Dust and mist)	1 mg/m3	1989-01-19	
Copper	7440-50-8	PEL (Fumes)	0,1 mg/m3	2014-11-26	

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silver	7440-22-4	TWA	0,1 mg/m3	2008-01-01	
silver	7440-22-4	TWA (Dust)	0,01 mg/m3	2005-09-01	
silver	7440-22-4	TWA	0,01 mg/m3	1989-01-19	
silver	7440-22-4	TWA	0,01 mg/m3	1989-01-19	
silver	7440-22-4	TWA	0,01 mg/m3	2011-07-01	
silver	7440-22-4	TWA (Dust and fume)	0,1 mg/m3	2013-03-01	
silver	7440-22-4	TWA (Dust)	0,01 mg/m3	2013-10-08	
silver	7440-22-4	PEL	0,01 mg/m3	2014-11-26	

8.2 Exposure controls

Personal protective equipment

Eye protection : Safety glasses

: Wear face-shield and protective suit for abnormal processing problems.

Hand protection

Material : Leather

Remarks : Leather gloves

The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other.

The exact break through time can be obtained from the protective glove producer and this has to be observed.

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Recommended preventive skin protection

- : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Skin and body protection : Long sleeved clothing
Safety shoes
- : Dust impervious protective suit
Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- Respiratory protection : Use suitable breathing protection if workplace concentration requires.
Respirator with a dust filter
P1 filter

Environmental exposure controls

- General advice :
- : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.
- Water : The product should not be allowed to enter drains, water courses or the soil.
- :

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

Appearance	: powder
Colour	: coloured
Odour	: characteristic
pH	: No data available
Freezing point	: No data available
Boiling point/boiling range	: No data available
Flash point	: No data available
Bulk density	: No data available
Flammability (solid, gas)	: Combustible Solids
Auto-flammability	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Density	: No data available
Solubility(ies)	
Water solubility	: insoluble
Miscibility with water	: immiscible
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Ignition temperature	: No data available
Thermal decomposition	: No data available

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Viscosity, dynamic : No data available
Viscosity, kinematic : No data available
Flow time : No data available

9.2 Other information

Self-Accelerating decomposition temperature (SADT) : No data available
Self-heating substances : No data available
Heat of combustion : No data available
Impact sensitivity : No data available
Surface tension : No data available

Conductivity : No data available
Sublimation point : No data available
Molecular weight : No data available

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

No decomposition if stored and applied as directed.
No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : Stable under recommended storage conditions., No hazards to be specially mentioned.

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No decomposition if stored and applied as directed.

Dust may form explosive mixture in air.

10.4 Conditions to avoid

Conditions to avoid : No data available

No data available

10.5 Incompatible materials

Materials to avoid : No data available

10.6 Hazardous decomposition products

Hazardous decomposition products : No data available

Other information : No data available

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity****Components:****Copper :**

Acute oral toxicity : The component/mixture is moderately toxic after single ingestion.

Skin corrosion/irritation**Product**

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May cause skin irritation in susceptible persons.

Serious eye damage/eye irritation**Product**

Eye irritation

Respiratory or skin sensitisation

No data available

Carcinogenicity

No data available

Toxicity to reproduction/fertility

No data available

Reprod.Tox./Development/Teratogenicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

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Further information**Product**

No data available

SECTION 12: Ecological information**12.1 Toxicity****Components:****copper (7440-50-8) :**

M-Factor : 10

Ecotoxicology Assessment

Short-term (acute) aquatic hazard : Very toxic to aquatic life.

Long-term (chronic) aquatic hazard : Very toxic to aquatic life with long lasting effects.

silver (7440-22-4) :

M-Factor : 10

Ecotoxicology Assessment

Short-term (acute) aquatic hazard : Very toxic to aquatic life.

Long-term (chronic) aquatic hazard : Very toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

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12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects**Product:**Additional ecological
information: An environmental hazard cannot be excluded in the event of
unprofessional handling or disposal., Very toxic to aquatic life
with long lasting effects.

SECTION 13: Disposal considerations

European Waste Catalogue : 12 01 04 - non-ferrous metal dust and particles

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water
courses or the soil.
Do not contaminate ponds, waterways or ditches with
chemical or used container.
Send to a licensed waste management company.
In accordance with local and national regulations.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.
In accordance with local and national regulations.

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SECTION 14: Transport information**14.1 UN number****ADR** : 3077**TDG**

Not dangerous goods

CFR

Not dangerous goods

IMDG : 3077**IATA** : 3077**14.2 Proper shipping name****ADR** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S.
(Copper metal powder)**TDG**

Not dangerous goods

CFR

Not dangerous goods

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S.
(,Copper metal powder)**IATA** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S.
(Copper metal powder)**14.3 Transport hazard class****ADR** : 9**TDG**

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Not dangerous goods

CFR

Not dangerous goods

IMDG : 9**IATA** : 9**14.4 Packing group****ADR**

Packaging group : III

Classification Code : M7

Hazard Identification Number : 90

Labels : 9

TDG

Not dangerous goods

CFR

Not dangerous goods

IMDG

Packaging group : III

Labels : 9

EmS Number : F-A, S-F

IATAPacking instruction (cargo
aircraft) : 956Packing instruction
(passenger aircraft) : 956

Packing instruction (LQ) : Y956

Packaging group : III

Labels : 9

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14.5 Environmental hazards

IMDG : Marine pollutant
ADR : Environmentally hazardous

14.6 Special precautions for user

IMDG Code- segregation group:
: IMDG Code segregation group 7 - Heavy metals and their salts

For single packagings <=5L / 5 kg, or combination packagings containing inner packagings <= 5L / 5 kg net per inner packaging, SV375 ADR, 2.10.2.7 IMDG-Code, A197 IATA-DGR may be applied.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC CodeNo data available

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59) : Not applicable

15.2 Chemical safety assessmentNo data available

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SECTION 16: Other information**Full text of H-Statements**

- H302 : Harmful if swallowed.
- H319 : Causes serious eye irritation.
- H400 : Very toxic to aquatic life.
- H410 : Very toxic to aquatic life with long lasting effects.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.