

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 31.01.2014




Version number 1

Revision: 31.01.2014

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

- **Product identifier**
- **Trade name:** Hochleistungs-Glanzkupferbad Galvanoplastik, Rhodnette Kupferbad, Arcuplat Schnellverkupferung
Galvanoplast bright copper bath, Rhodnette copper bath, Arcuplat copper bath
- **Article number:** 3060400202, 3010400502, 3170400702
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Galvanic bath
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Wieland Edelmetalle GmbH
Schwenninger Str. 13
75179 Pforzheim
Telefon +49 (07231)-1393-0, Telefax +49 (07231)-1393-100
- **Further information obtainable from:**
Wieland Edelmetalle GmbH
www.wieland-edelmetalle.de
msds@wieland-edelmetalle.de
- **Emergency telephone number:**
GIZ-Nord, Göttingen, Germany
+49 551 19240
Member of EPECS Network

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
- 
 GHS05 corrosion
 Skin Corr. 1A H314 Causes severe skin burns and eye damage.
- 
 GHS09 environment
 Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.
- 
 GHS07
 Eye Irrit. 2 H319 Causes serious eye irritation.

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



C; Corrosive



R34: Causes burns.



N; Dangerous for the environment

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

(Contd. on page 2)

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 31.01.2014

Version number 1

Revision: 31.01.2014

**Trade name: Hochleistungs-Glantzupferbad Galvanoplastik, Rhodnette Kupferbad, Arcuplat Schnellverkupferung
Galvanoplast bright copper bath, Rhodnette copper bath, Arcuplat copper bath**

(Contd. of page 1)

- **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS05 GHS09

- **Signal word** Danger
- **Hazard statements**
H314 Causes severe skin burns and eye damage.
H411 Toxic to aquatic life with long lasting effects.
- **Precautionary statements**
P280 Wear protective gloves / eye protection.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 7758-98-7 EINECS: 231-847-6	copper sulphate Xn R22; Xi R36/38; N R50/53 Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319	< 15%
CAS: 7664-93-9 EINECS: 231-639-5	sulphuric acid C R35 Skin Corr. 1A, H314	< 5%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 31.01.2014

Version number 1

Revision: 31.01.2014

**Trade name: Hochleistungs-Glanzkupferbad Galvanoplastik, Rhodnette Kupferbad, Arcuplat
Schnellverkupferung
Galvanoplast bright copper bath, Rhodnette copper bath, Arcuplat
copper bath**

(Contd. of page 2)

- If skin irritation continues, consult a doctor.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; call for medical help immediately.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Hazards** Danger of gastric perforation.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **Special hazards arising from the substance or mixture**
Under certain fire conditions, traces of other toxic gases cannot be excluded, e.g.:
Sulphur dioxide (SO₂)
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Ensure adequate ventilation
- **Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**

(Contd. on page 4)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 31.01.2014

Version number 1

Revision: 31.01.2014

**Trade name: Hochleistungs-Glankupferbad Galvanoplastik, Rhodnette Kupferbad, Arcuplat
Schnellverkupferung
Galvanoplast bright copper bath, Rhodnette copper bath, Arcuplat
copper bath**

(Contd. of page 3)

Sulfuric acid solution:

Suitable materials:

generally resistant: Glass, Enamel

At lower temperatures: Polyethylene PE, Polyvinyl chloride, Polypropylene PP

At different concentrations and range of temperatures the resistance of metals may vary greatly.

Before choosing materials of construction obtain specialized information.

Unsuitable materials:

non-noble metals

- **Information about storage in one common storage facility:**

Storage class 8 B (Non-combustible corrosive substances)

Only substances of the same storage class should be stored together.

Collocated storage with the following substances is prohibited:

- Pharmaceuticals, foods, and animal feeds including additives.
- Infectious, radioactive und explosive substances.
- Strongly oxidizing substances of storage class 5.1A.
- Organic peroxides and self reactive substances.

Under certain conditions the collocated storage with the following sub-stances is permitted (For more details see TRGS 510):

- Other explosive substances of storage class 4.1A.
- Spontaneously flammable substances.
- Substances liberating flammable gases in contact with water.
- Ammonium nitrate and preparations containing ammonium nitrate.

The substance should not be stored with substances with which hazardous chemical reactions are possible.

- **Further information about storage conditions:** Keep receptacle tightly sealed.

- **Storage class:** 8B

- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

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

- **Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- **Additional information:** The lists valid during the making were used as basis.

- **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.

Avoid contact with the eyes and skin.

- **Respiratory protection:** Not necessary if room is well-ventilated.

- **Protection of hands:**



Protective gloves

- **Material of gloves**

Butyl rubber, BR

Fluorocarbon rubber (Viton)

Nitrile rubber, NBR

(Contd. on page 5)

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 31.01.2014

Version number 1

Revision: 31.01.2014

**Trade name: Hochleistungs-Glantzupferbad Galvanoplastik, Rhodnette Kupferbad, Arcuplat
Schnellverkupferung
Galvanoplast bright copper bath, Rhodnette copper bath, Arcuplat
copper bath**

(Contd. of page 4)

Chloroprene rubber, CR

· **Penetration time of glove material**

The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

Value for the permeation: Level ≤ 6

· **Not suitable are gloves made of the following materials:**

- Leather gloves
- Strong material gloves

· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Protective work clothing

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Fluid

Colour: Blue

· **Odour:** Characteristic

· **pH-value at 20 °C:** < 1

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 105 °C

· **Flash point:** Not applicable.

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Density at 20 °C:** 1.104 g/cm³

· **Solubility in / Miscibility with water:**

Fully miscible.

· **Other information** No further relevant information available.

10 Stability and reactivity

· **Reactivity**

· **Chemical stability**

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

· **Possibility of hazardous reactions** Reacts with strong alkali.

· **Conditions to avoid** No further relevant information available.

· **Incompatible materials:** No further relevant information available.

· **Hazardous decomposition products:** Sulphur dioxide

GB

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 31.01.2014

Version number 1

Revision: 31.01.2014

**Trade name: Hochleistungs-Glantzupferbad Galvanoplastik, Rhodnette Kupferbad, Arcuplat
Schnellverkupferung
Galvanoplast bright copper bath, Rhodnette copper bath, Arcuplat
copper bath**

(Contd. of page 5)

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:

- LD/LC50 values relevant for classification:

7758-98-7 copper sulphate

Oral	LD50	960 mg/kg (rat)
------	------	-----------------

10124-43-3 cobalt sulphate

Oral	LD50	582 mg/kg (rat)
------	------	-----------------

- **Primary irritant effect:**
- **on the skin:** Caustic effect on skin and mucous membranes.
- **on the eye:** Strong caustic effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Corrosive
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**
Toxic for aquatic organisms
Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.
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.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Must be specially treated adhering to official regulations.
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

(Contd. on page 7)

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 31.01.2014

Version number 1




Revision: 31.01.2014

Trade name: Hochleistungs-Glankupferbad Galvanoplastik, Rhodnette Kupferbad, Arcuplat Schnellverkupferung Galvanoplast bright copper bath, Rhodnette copper bath, Arcuplat copper bath

(Contd. of page 6)

- **Uncleaned packaging:**
- **Recommendation:**
Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning. Packagings that may not be cleansed are to be disposed of in the same manner as the product.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

· UN-Number · ADR, IMDG, IATA	UN2796
· UN proper shipping name · ADR · IMDG · IATA	2796 SULPHURIC ACID, solution, ENVIRONMENTALLY HAZARDOUS SULPHURIC ACID, solution, MARINE POLLUTANT SULPHURIC ACID, solution
· Transport hazard class(es) · ADR 	8 (C1) Corrosive substances. 8
· IMDG 	8 Corrosive substances. 8
· IATA 	8 Corrosive substances. 8
· Packing group · ADR, IMDG, IATA	II
· Environmental hazards: · Marine pollutant: · Special marking (ADR):	Product contains environmentally hazardous substances: copper sulphate Yes Symbol (fish and tree) Symbol (fish and tree)
· Special precautions for user · Danger code (Kemler): · EMS Number:	Warning: Corrosive substances. 80 F-A,S-B

(Contd. on page 8)

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 31.01.2014

Version number 1

Revision: 31.01.2014

**Trade name: Hochleistungs-Glantzupferbad Galvanoplastik, Rhodnette Kupferbad, Arcuplat
Schnellverkupferung
Galvanoplast bright copper bath, Rhodnette copper bath, Arcuplat
copper bath**

(Contd. of page 7)

· Segregation groups	Acids
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	1L
· Transport category	2
· Tunnel restriction code	E
· IMDG	
· Remarks:	(copper sulphate)
· UN "Model Regulation":	UN 2796, SULPHURIC ACID, solution, ENVIRONMENTALLY HAZARDOUS, 8, II

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- National regulations:
- Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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

- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.

- R22 Harmful if swallowed.
- R35 Causes severe burns.
- R36/38 Irritating to eyes and skin.
- R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· Contact: Herr Marcus Müller

· 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)
- IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
- ICAO: International Civil Aviation Organization
- ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
- 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 Harmonized 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)
- LC50: Lethal concentration, 50 percent

(Contd. on page 9)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 31.01.2014

Version number 1

Revision: 31.01.2014

**Trade name: Hochleistungs-Glankupferbad Galvanoplastik, Rhodnette Kupferbad, Arcuplat
Schnellverkupferung
Galvanoplast bright copper bath, Rhodnette copper bath, Arcuplat
copper bath**

LD50: Lethal dose, 50 percent

(Contd. of page 8)

· *** Data compared to the previous version altered.**

GB