

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

Printing date 19.03.2018

Version number 3

Revision: 19.03.2018

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

· Trade name: **WILAPLAT Haftgoldbad AC 3 SSF, stark sauer**  
**WILAPLAT preplating gold bath AC3 SSF, highly acidic**

· Article number: 3070100102

· **1.2 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

**1.3 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

**1.4 Emergency telephone number:**

Emergency CONTACT (24-Hour-Number):GBK GmbH +49 (0)6132-84463

**2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**



GHS08 health hazard

Carc. 1B            H350i May cause cancer by inhalation.



GHS05 corrosion

Skin Corr. 1A        H314 Causes severe skin burns and eye damage.

Eye Dam. 1         H318 Causes serious eye damage.



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Acute Tox. 4        H302 Harmful if swallowed.

Acute Tox. 4        H312 Harmful in contact with skin.

Acute Tox. 4        H332 Harmful if inhaled.

**2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

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· **Hazard pictograms**



GHS05 GHS07 GHS08 GHS09

· **Signal word** Danger

· **Hazard-determining components of labelling:**

sulphuric acid  
Potassium tetracyanoaurate(III)  
cobalt sulphate

· **Hazard statements**

H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.  
H314 Causes severe skin burns and eye damage.  
H350i May cause cancer by inhalation.  
H411 Toxic to aquatic life with long lasting effects.

· **Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P405 Store locked up.

· **Additional information:**

EUH208 Contains cobalt sulphate. May produce an allergic reaction.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.  
· **vPvB:** Not applicable.

· **3.2 Chemical characterisation: Mixtures**

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

|                                      |   |      |
|--------------------------------------|---|------|
| CAS: 14263-59-3                      | Potassium tetracyanoaurate(III)<br>☠ Acute Tox. 2, H300; Acute Tox. 1, H310; Acute Tox. 1, H330; ☠ Met. Corr.1, H290; Eye Dam. 1, H318; ☠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ☠ Skin Irrit. 2, H315 | ≤ 1% |
| CAS: 10124-43-3<br>EINECS: 233-334-2 | cobalt sulphate<br>☠ Resp. Sens. 1, H334; Muta. 2, H341; Carc. 1B, H350i; Repr. 1B, H360F; ☠ Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=10); ☠ Acute Tox. 4, H302; Skin Sens. 1, H317             | ≤ 1% |

· **SVHC**

10124-43-3 cobalt sulphate

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

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### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:**  
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
- **After skin contact:**  
Immediately wash with water and soap and rinse thoroughly.  
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.
- **4.2 Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture** Hydrogen cyanide (HCN)
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**  
Collect contaminated fire fighting water separately. It must not enter the sewage system.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **6.2 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.
- **6.3 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.
- **6.4 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.

- \* [REDACTED]
- **7.1 Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.
  - **Information about fire - and explosion protection:** The product is not flammable.
  - **7.2 Conditions for safe storage, including any incompatibilities**
  - **Storage:**
  - **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.

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- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Store under lock and key and with access restricted to technical experts or their assistants only.  
Keep receptacle tightly sealed.
- **Storage class:** 8 B
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

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

#### 8.1 Control parameters

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

**10124-43-3 cobalt sulphate**

|     |  |
|-----|--|
| WEL | Long-term value: 0.1 mg/m <sup>3</sup> |
|     | Carc, Sen                              |

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

#### 8.2 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.
- Store protective clothing separately.
- Avoid contact with the eyes and skin.

##### Respiratory protection:

- Suitable respiratory protective device recommended.
- Filter P3
- Filter B

##### Protection of hands:



Protective gloves

##### Material of gloves

- Butyl rubber, BR
- Nitrile rubber, NBR
- Chloroprene rubber, CR
- Fluorocarbon rubber (Viton)

##### Penetration time of glove material

- The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

##### Not suitable are gloves made of the following materials:

- Strong material gloves
- Leather gloves

##### Eye protection:



Tightly sealed goggles

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· **Body protection:** Protective work clothing

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### SECTION 9: Physical and chemical properties

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

· **General Information**

· **Appearance:**

|                  |                  |
|------------------|------------------|
| · <b>Form:</b>   | Solution         |
| · <b>Colour:</b> | Pink             |
| · <b>Odour:</b>  | Product specific |

· **pH-value at 20 °C:** 1

· **Change in condition**

|   |               |
|---|---------------|
| · <b>Melting point/freezing point:</b>            | Undetermined. |
| · <b>Initial boiling point and boiling range:</b> | ca. 100 °C    |

· **Flash point:** Not applicable.

· **Ignition temperature:** Not applicable

· **Auto-ignition temperature:** Product is not selfigniting.

· **Explosive properties:** Product does not present an explosion hazard.

· **Explosion limits:**

|                               |      |
|-------------------------------|------|
| · <b>Oxidising properties</b> | None |
|-------------------------------|------|

· **Density at 20 °C:** 1,02 g/cm<sup>3</sup>

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

Fully miscible.

· **Solvent content:**

|                            |        |
|----------------------------|--------|
| · <b>Organic solvents:</b> | 0,0 %  |
| · <b>Water:</b>            | > 95 % |

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

· **10.1 Reactivity** No further relevant information available.

· **10.2 Chemical stability**

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

· **10.3 Possibility of hazardous reactions** Develops toxic gases/fumes.

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

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

· **10.6 Hazardous decomposition products:** Hydrogen cyanide (prussic acid)

· **11.1 Information on toxicological effects**

· **Acute toxicity**

Harmful if swallowed, in contact with skin or if inhaled.

· **LD/LC50 values relevant for classification:**

**ATE (Acute Toxicity Estimates)**

|      |      |             |
|------|------|-------------|
| Oral | LD50 | 1,020 mg/kg |
|------|------|-------------|

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|            |          |             |
|------------|----------|-------------|
| Dermal     | LD50     | 1,020 mg/kg |
| Inhalative | LC50/4 h | 10.2 mg/l   |

### 14263-59-3 Potassium tetracyanoaurate(III)

|            |          |                 |
|------------|----------|-----------------|
| Oral       | LD50     | 5 mg/kg (ATE)   |
| Dermal     | LD50     | 5 mg/kg (ATE)   |
| Inhalative | LC50/4 h | 0.05 mg/l (ATE) |

### 10124-43-3 cobalt sulphate

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

- **Primary irritant effect:**
- **Skin corrosion/irritation**  
Causes severe skin burns and eye damage.
- **Serious eye damage/irritation**  
Causes serious eye damage.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity**  
May cause cancer by inhalation.
- **Reproductive toxicity** 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.

## SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Harmful to 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.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

## SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  
Contact manufacturer for recycling information.  
Must be specially treated adhering to official regulations.
- **Uncleaned packaging:**
- **Recommendation:**  
Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

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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.

\*

|   |   |
|---|---|
|   |   |
| · 14.1 UN-Number<br>· ADR, IMDG, IATA   | UN2796  |
| · 14.2 UN proper shipping name<br>· ADR<br>· IMDG<br>· IATA   | 2796 SULPHURIC ACID, ENVIRONMENTALLY HAZARDOUS<br>SULPHURIC ACID, MARINE POLLUTANT<br>Sulfuric acid |
| · 14.3 Transport hazard class(es)<br>· ADR  |   |
|                      |   |
| · Class<br>· Label  | 8 (C1) Corrosive substances.<br>8   |
| · IMDG  |   |
|                    |   |
| · Class<br>· Label  | 8 Corrosive substances.<br>8  |
| · IATA  |   |
|                    |   |
| · Class<br>· Label  | 8 Corrosive substances.<br>8  |
| · 14.4 Packing group<br>· ADR, IMDG, IATA   | II  |
| · 14.5 Environmental hazards:<br>· Marine pollutant:<br>· Special marking (ADR):                      | Yes<br>Symbol (fish and tree)<br>Symbol (fish and tree)   |
| · 14.6 Special precautions for user<br>· Danger code (Kemler):<br>· EMS Number:<br>· Stowage Category | Warning: Corrosive substances.<br>80<br>F-A,S-B<br>B  |
| · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code                             | Not applicable.   |

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**· Transport/Additional information:**

**· ADR**

- Limited quantities (LQ) 1L
- Excepted quantities (EQ) Code: E2  
Maximum net quantity per inner packaging: 30 ml  
Maximum net quantity per outer packaging: 500 ml
- Transport category 2
- Tunnel restriction code E

**· IMDG**

- Limited quantities (LQ) 1L
- Excepted quantities (EQ) Code: E2  
Maximum net quantity per inner packaging: 30 ml  
Maximum net quantity per outer packaging: 500 ml

- UN "Model Regulation": UN2796, SULPHURIC ACID, ENVIRONMENTALLY HAZARDOUS, 8, II

**· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

- Directive 2012/18/EU
- Named dangerous substances - ANNEX I None of the ingredients is listed.
- Seveso category E2 Hazardous to the Aquatic Environment
- Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 28, 30

**· National regulations:**

**· Technical instructions (air):**

| Class | Share in % |
|-------|------------|
| II    | 0.3        |

- Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.

**· Other regulations, limitations and prohibitive regulations**

**· Substances of very high concern (SVHC) according to REACH, Article 57**

10124-43-3 cobalt sulphate

- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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**

- H290 May be corrosive to metals.
- H300 Fatal if swallowed.
- H302 Harmful if swallowed.
- H310 Fatal in contact with skin.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H330 Fatal if inhaled.

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H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H341 Suspected of causing genetic defects.

H350i May cause cancer by inhalation.

H360F May damage fertility.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

**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)

ICAO: International Civil Aviation Organisation

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 Harmonised 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

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Met. Corr. 1: Corrosive to metals – Category 1

Acute Tox. 2: Acute toxicity – Category 2

Acute Tox. 4: Acute toxicity – Category 4

Acute Tox. 1: Acute toxicity – Category 1

Skin Corr. 1A: Skin corrosion/irritation – Category 1A

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Resp. Sens. 1: Respiratory sensitisation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

Muta. 2: Germ cell mutagenicity – Category 2

Carc. 1B: Carcinogenicity – Category 1B

Repr. 1B: Reproductive toxicity – Category 1B

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

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