







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

- **Product identifier**
- **Trade name:** **WILAPLAT Haftgoldbad AC 3 SSF, stark sauer**
WILAPLAT preplating gold bath AC3 SSF, highly acidic
- **Article number:** 3070100102
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation** 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**
-  GHS08 health hazard
 Carc. 1B H350i May cause cancer by inhalation.
-  GHS05 corrosion
 Skin Corr. 1C H314 Causes severe skin burns and 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.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
-  T; Toxic
 R49: May cause cancer by inhalation.
-  C; Corrosive
 R34: Causes burns.

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Xn; Harmful

R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.



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.

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 GHS07 GHS08 GHS09

Signal word Danger**Hazard-determining components of labelling:**

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): 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.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

Contains cobalt sulphate. May produce an allergic reaction.

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.

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




















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· Dangerous components:		
CAS: 14263-59-3	Potassium tetracyanoaurate(III)  T+ R26/27/28;  Xi R38-41;  N R50/53 R32 <hr/>  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 EINECS: 233-334-2	cobalt sulphate  T Repr. Cat. 2 R49-60;  Xn R22-68;  Xn R42/43;  N R50/53 Carc. Cat. 2, Muta. Cat. 3 <hr/>  Resp. Sens. 1, H334;  Muta. 2, H341;  Carc. 1B, H350i;  Repr. 1B, H360F;  Aquatic Acute 1, H400;  Aquatic Chronic 1, H410;  Acute Tox. 4, H302; Skin Sens. 1, H317	≤ 1%

 · **SVHC**

10124-43-3 cobalt sulphate

 · **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. 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.

 · **Information for doctor:**

 · **Most important symptoms and effects, both acute and delayed** No further relevant information available.

 · **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** Hydrogen cyanide (HCN)

 · **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.

6 Accidental release measures

 · **Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

 · **Environmental precautions:**

Inform respective authorities in case of seepage into water course or sewage system.

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- 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.
- **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.
Open and handle receptacle with care.
- **Information about fire - and explosion protection:** The product is not flammable.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **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:**
Store under lock and key and with access restricted to technical experts or their assistants only.
Keep receptacle tightly sealed.
- **Storage class:** 8 B
- **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:**

10124-43-3 cobalt sulphate

WEL	Long-term value: 0.1 mg/m ³
	Carc, Sen

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

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- **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 trough 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

- **Body protection:** Protective work clothing

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Solution
Colour:	Pink
- **Odour:** Product specific
- **pH-value at 20 °C:** 1
- **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	ca. 100 °C
- **Flash point:** Not applicable.
- **Ignition temperature:** Not applicable
- **Self-igniting:** Product is not selfigniting.

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

· **Explosion limits:**
· **Oxidizing properties** None

· **Density at 20 °C:** 1.02 g/cm³

· **Solubility in / Miscibility with water:** Fully miscible.

· **Solvent content:**
· **Organic solvents:** 0.0 %
· **Water:** > 95 %
· **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** Develops toxic gases/fumes.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** Hydrogen cyanide (prussic acid)

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

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

10124-43-3 cobalt sulphate

Oral	LD50	582 mg/kg (rat)
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- **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:
Harmful
Corrosive
Carcinogenic if inhaled.
- **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
Carc. 1B

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.

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- **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.
- **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**
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.
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	2796 SULPHURIC ACID, ENVIRONMENTALLY HAZARDOUS
· IMDG	SULPHURIC ACID, MARINE POLLUTANT
· IATA	SULPHURIC ACID
· Transport hazard class(es)	
· ADR	
	
· Class	8 (C1) Corrosive substances.
· Label	8
· IMDG	
	
· Class	8 Corrosive substances.

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· Label	8
· IATA	
	
· Class	8 Corrosive substances.
· Label	8
· Packing group	
· ADR, IMDG, IATA	II
· Environmental hazards:	
· Marine pollutant:	Yes Symbol (fish and tree)
· Special marking (ADR):	Symbol (fish and tree)
· Special precautions for user	Warning: Corrosive substances.
· Danger code (Kemler):	80
· EMS Number:	F-A,S-B
· 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
· UN "Model Regulation":	UN2796, SULPHURIC ACID, 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.
- Other regulations, limitations and prohibitive regulations

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

10124-43-3	cobalt sulphate
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- 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

H290	May be corrosive to metals.
H300	Fatal if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H315	Causes skin irritation.

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- H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H330 Fatal if inhaled.
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.
- R22 Harmful if swallowed.
R26/27/28 Very toxic by inhalation, in contact with skin and if swallowed.
R32 Contact with acids liberates very toxic gas.
R38 Irritating to skin.
R41 Risk of serious damage to eyes.
R42/43 May cause sensitisation by inhalation and skin contact.
R49 May cause cancer by inhalation.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R60 May impair fertility.
R68 Possible risk of irreversible effects.

· **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)

ICAO: International Civil Aviation Organization

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

LD50: Lethal dose, 50 percent

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

GB