

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

Printing date 14.11.2018



Version number 3

Revision: 30.08.2017

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

- **1.1 Product identifier**
- **Trade name:** WILAPLAT Glanzgoldplattierbad 750 SN mit 4gAu/l  
WILAPLAT gold plating bath 750 SN with 4g Au/l
- **Article number:** 3080101002
- **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

### SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
-  GHS08 health hazard  
Carc. 1A      H350i May cause cancer by inhalation.
-  GHS07  
Acute Tox. 4      H302 Harmful if swallowed.
- Aquatic Chronic 3      H412 Harmful to aquatic life with long lasting effects.

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



GHS07      GHS08

- **Signal word** Danger
- **Hazard-determining components of labelling:**  
potassium dicyanoaurate  
nickel carbonate
- **Hazard statements**  
H302 Harmful if swallowed.  
H350i May cause cancer by inhalation.  
H412 Harmful to aquatic life with long lasting effects.

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## Precautionary statements

- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
- P330 Rinse mouth.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

## Additional information:

EUH208 Contains potassium dicyanoaurate, nickel carbonate. May produce an allergic reaction.

## 2.3 Other hazards

## Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

## SECTION 3: Composition/information on ingredients

### 3.2 Chemical characterisation: Mixtures

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

#### Dangerous components:

|                                      |  |       |
|--------------------------------------|--|-------|
| CAS: 77-92-9<br>EINECS: 201-069-1    | citric acid<br>! Eye Irrit. 2, H319  | 5-10% |
| CAS: 13967-50-5<br>EINECS: 237-748-4 | potassium dicyanoaurate<br>Acute Tox. 2, H300; Acute Tox. 2, H330; Met. Corr. 1, H290; Eye Dam. 1, H318; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Irrit. 2, H315; Skin Sens. 1, H317   | ≤ 1%  |
| CAS: 3333-67-3<br>EINECS: 222-068-2  | nickel carbonate<br>Resp. Sens. 1, H334; Muta. 2, H341; Carc. 1A, H350i; Repr. 1B, H360D; STOT RE 1, H372; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Irrit. 2, H315; Skin Sens. 1, H317 | ≤ 1%  |

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

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

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. If symptoms persist, 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.

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- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

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### 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.

### 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.  
Ensure adequate ventilation.
- **6.4 Reference to other sections** See Section 13 for disposal information.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** Keep respiratory protective device available.
- **7.2 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:** Do not store together with acids.
- **Further information about storage conditions:**  
Keep receptacle tightly sealed.  
Store under lock and key and with access restricted to technical experts or their assistants only.
- **Storage class:** 6.1D
- **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:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

#### · DNELs

**13967-50-5 potassium dicyanoaurate**

Oral DNEL(Comm.)akut 4.5 mg/kg (-) (CN)

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|                      |                     |
|----------------------|---------------------|
| DNEL(Com.)longterm   | 0.05 mg/kg (-) (CN) |
| DNEL(Industrie) akut | 4.5 mg/kg (-) (CN)  |
| DNEL(Indust.)longt.  | 0.05 mg/kg (-) (CN) |

## · PNECs

### 13967-50-5 potassium dicyanoaurate

|                   |                                   |
|-------------------|-----------------------------------|
| PNEC (Industrie)  | 0.03 µg/l (H <sub>2</sub> O) (CN) |
| PNEC (Commercial) | 0.03 µg/l (H <sub>2</sub> O) (CN) |

· **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.  
 Avoid contact with the eyes and skin.

#### · Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation.  
 Filter B

#### · Protection of hands:



Protective gloves

#### · Material of gloves

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

#### · 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:

Strong material gloves  
 Leather gloves

#### · Eye protection:



Tightly sealed goggles

#### · Body protection: Protective work clothing

## SECTION 9: Physical and chemical properties

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

#### · General Information

#### · Appearance:

|         |                |
|---------|----------------|
| Form:   | Fluid          |
| Colour: | Light blue     |
| Odour:  | Characteristic |

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|   |   |
|---|---|
| · pH-value at 20 °C:                      | 4   |
| · Change in condition                     |   |
| Melting point/freezing point:             | Undetermined.                                 |
| Initial boiling point and boiling range:  | 100 °C  |
| · Flash point:                            | Not applicable.                               |
| · Auto-ignition temperature:              | Product is not selfigniting.                  |
| · Explosive properties:                   | Product does not present an explosion hazard. |
| · Explosion limits:                       |   |
| Oxidising properties                      | None  |
| · Density at 20 °C:                       | 1.08 g/cm <sup>3</sup>                        |
| · Solubility in / Miscibility with water: | Fully miscible.                               |
| · Solvent content:                        |   |
| Organic solvents:                         | 0.0 %   |
| · 9.2 Other information                   | No further relevant information available.    |

## SECTION 10: Stability and reactivity

- **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)

## SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**  
Harmful if swallowed.

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

#### ATE (Acute Toxicity Estimates)

|            |          |                   |
|------------|----------|-------------------|
| Oral       | LD50     | 5,370 mg/kg (rat) |
| Inhalative | LC50/4 h | 92.6 mg/l         |

#### 13967-50-5 potassium dicyanoaurate

|            |          |                                 |
|------------|----------|---------------------------------|
| Oral       | LD50     | 29 mg/kg (rat)                  |
| Dermal     | LD50     | 100 mg/kg (human) (CN)          |
| Inhalative | LC50/4 h | 0.5 mg/l (ATE)                  |
|            | LC50     | 524 mg/kg (10min) (human) (HCN) |

#### 3333-67-3 nickel carbonate

|            |          |                 |
|------------|----------|-----------------|
| Oral       | LD50     | 500 mg/kg (ATE) |
| Inhalative | LC50/4 h | 11 mg/l (ATE)   |

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.

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- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **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:

##### **13967-50-5 potassium dicyanoaurate**

|      |  |
|------|--|
| LC50 | 0.083 mg/l (96h) (Lepomis macrochirus (bluegrill)) (CN)      |
| LC50 | 0.12 mg/l (96h) (Pimephales promelas (fathead minnow)) (CN)  |
|      | 0.057 mg/l (96h) (Onchorhynchus mykiss (rainbow trout)) (CN) |
| EC50 | 0.041 mg/l (48h) (Daphnia magna (water flea)) (CN)           |
| EC50 | 1.8 mg/l (72h) (Eutosiphon sulcatum) (CN)                    |
| IC50 | 0.03 mg/l (8d) (Sc.quadricauda) (CN)                         |

- **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:**  
Harmful to aquatic organisms  
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.  
Packagings that may not be cleansed are to be disposed of in the same manner as the product.

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· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

## SECTION 14: Transport information

|  |  |
|--|--|
| · <b>14.1 UN-Number</b>  |  |
| · <b>ADR, ADN, IMDG, IATA</b>  | Void   |
| · <b>14.2 UN proper shipping name</b>  |  |
| · <b>ADR</b>   | Void   |
| · <b>ADN, IMDG, IATA</b>   | Void   |
| · <b>14.3 Transport hazard class(es)</b>   |  |
| · <b>ADR, ADN, IMDG, IATA</b>  |  |
| · <b>Class</b>   | Void   |
| · <b>14.4 Packing group</b>  |  |
| · <b>ADR, IMDG, IATA</b>   | Void   |
| · <b>14.5 Environmental hazards:</b>   |  |
| · <b>Marine pollutant:</b>   | No   |
| · <b>14.6 Special precautions for user</b>                                       | Not applicable.                                      |
| · <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b> | Not applicable.                                      |
| · <b>Transport/Additional information:</b>                                       | Not dangerous according to the above specifications. |
| · <b>UN "Model Regulation":</b>  | Void   |

## SECTION 15: Regulatory information

- **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.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **National regulations:**
- **Technical instructions (air):**

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

- **Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## SECTION 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.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.

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- H319 Causes serious eye irritation.
- H330 Fatal if inhaled.
- H332 Harmful 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.
- H360D May damage the unborn child.
- H372 Causes damage to organs through prolonged or repeated exposure.
- 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)
- IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
- ICAO: International Civil Aviation Organisation
- ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (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 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)
- DNEL: Derived No-Effect Level (REACH)
- PNEC: Predicted No-Effect Concentration (REACH)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- 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
- Skin Irrit. 2: Skin corrosion/irritation – Category 2
- Eye Dam. 1: Serious eye damage/eye irritation – Category 1
- Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
- Resp. Sens. 1: Respiratory sensitisation – Category 1
- Skin Sens. 1: Skin sensitisation – Category 1
- Muta. 2: Germ cell mutagenicity – Category 2
- Carc. 1A: Carcinogenicity – Category 1Ai
- Repr. 1B: Reproductive toxicity – Category 1B
- STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
- 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 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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

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