

**Gold bath AGC Micro, gold bath AGC Micro Vision**

Version number: SDS 1.0

Date of compilation: 2019-06-07

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

**1.1 Product identifier**

Trade name **Gold bath AGC Micro, gold bath AGC Micro Vision**  
**Other names or synonyms** *Gold bath AGC Micro, gold bath AGC Micro Vision*  
 Registration number (REACH) not relevant (mixture)

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

Relevant identified uses Electrolyte for eletroforming  
 Medium for dental technology.  
 Professional use  
 Industrial use  
 Uses advised against For professional users only.

**1.3 Details of the supplier of the safety data sheet**

C.HAFNER GmbH + Co. KG  
 Maybachstr. 4  
 71299 Wimsheim  
 Germany

Telephone: +49-704490333-0  
 Telefax: +49-70449033-40  
 e-Mail: Website: www.c-hafner.de

Additional information

| Manufacturer |                          |                  |              |                |                            |
|--------------|--------------------------|------------------|--------------|----------------|----------------------------|
| Country      | Name                     | Postal code/city | Telephone    | Telefax        | Website                    |
| Germany      | Wieland Edelmetalle GmbH | 75179 Pforzheim  | 07231-1393-0 | 07231-1393-100 | www.wieland-edelmetalle.de |

| Supplier of the product |                        |                  |                  |                  |                 |
|-------------------------|------------------------|------------------|------------------|------------------|-----------------|
| Country                 | Name                   | Postal code/city | Telephone        | Telefax          | Website         |
| Germany                 | C.HAFNER GmbH + Co. KG | 71299 Wimsheim   | +49-7044-90333-0 | +49-7044-9033-40 | www.c-hafner.de |

e-mail (competent person) michael.huber@c-hafner.de (Dr. Michael Huber)  
 National contact Dr .Michael Huber  
 Telephone: +49-7231-424021-406  
 e-mail: Michael.huber@c-hafner.de

**1.4 Emergency telephone number**

Emergency information service This number is only for medical emergencies  
 Opening hours 24h-Notrufnummer

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**1.5 Additional relevant and available information**

**1.6 Remarks** there is no additional information

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008 (CLP)

| Section | Hazard class                      | Cat-egory | Hazard class and category | Hazard state-ment |
|---------|-----------------------------------|-----------|---------------------------|-------------------|
| 3.2     | skin corrosion/irritation         | 2         | Skin Irrit. 2             | H315              |
| 3.3     | serious eye damage/eye irritation | 2         | Eye Irrit. 2              | H319              |

For full text of abbreviations: see SECTION 16.

**2.2 Label elements**

Labelling according to Regulation (EC) No 1272/2008 (CLP)

- Signal word warning

- Pictograms

GHS07



- Hazard statements

H315 Causes skin irritation.  
H319 Causes serious eye irritation.

- Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P302+P352 IF ON SKIN: Wash with plenty of water.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P321 Specific treatment (see on this label).  
P332+P313 If skin irritation occurs: Get medical advice/attention.  
P337+P313 If eye irritation persists: Get medical advice/attention.  
P362+P364 Take off contaminated clothing and wash it before reuse.

- Supplemental hazard information

EUH031 Contact with acids liberates toxic gas.

**2.3 Other hazards**

There is no additional information.

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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**SECTION 3: Composition/information on ingredients**

**3.1 Substances**

Not relevant (mixture)

**3.2 Mixtures**

Description of the mixture

| Name of substance     | Identifier           | Wt%  | Classification acc. to GHS                  | Pictograms  |
|-----------------------|----------------------|------|---|---|
| Ammoniumgold(I)sulfit | CAS No<br>71662-32-3 | ≥ 10 | Skin Irrit. 2 / H315<br>Eye Irrit. 2 / H319 |  |

For full text of abbreviations: see SECTION 16.

**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

**4.2 Most important symptoms and effects, both acute and delayed**

Symptoms and effects are not known to date.

**4.3 Indication of any immediate medical attention and special treatment needed**

none

**SECTION 5: Firefighting measures**

**5.1 Extinguishing media**

Suitable extinguishing media

Water spray, Alcohol resistant foam, BC-powder, Carbon dioxide (CO<sub>2</sub>)

Unsuitable extinguishing media

Water jet

**5.2 Special hazards arising from the substance or mixture**

Under certain fire conditions, traces of other toxic gases cannot be excluded e.g. nitrous fumes, sulphur dioxide. .

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**5.3 Advice for firefighters**

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

Special protective equipment for firefighters

Wear self-contained breathing apparatus

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

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

**6.2 Environmental precautions**

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

**6.3 Methods and material for containment and cleaning up**

Advices on how to contain a spill

Covering of drains

Advices on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

**6.4 Reference to other sections**

Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas. Keep only in the original container in a cool well ventilated place away from acids.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

**7.2 Conditions for safe storage, including any incompatibilities**

Control of effects

Protect against external exposure, such as

Frost

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**7.3 Specific end use(s)**

See section 16 for a general overview.

**SECTION 8: Exposure controls/personal protection**

**8.1 Control parameters**

**National limit values**

Occupational exposure limit values (Workplace Exposure Limits)

This information is not available.

**8.2 Exposure controls**

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

Preventive skin protection (barrier creams/ointments) is recommended.

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374 and regulation (EU) Nr. 2016/425. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.

- Type of material

NR: natural rubber, latex, CR: chloroprene (chlorobutadiene) rubber, NBR: acrylonitrile-butadiene rubber, FKM: fluoro-elastomer

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

**SECTION 9: Physical and chemical properties**

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

**Appearance**

|                |               |
|----------------|---------------|
| Physical state | liquid        |
| Colour         | colourless    |
| Odour          | Ammoniakartig |

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### Other safety parameters

|   |                                   |
|---|-----------------------------------|
| pH (value)                              | 9 (bei 20 °C)                     |
| Melting point/freezing point            | not determined                    |
| Initial boiling point and boiling range | not determined                    |
| Flash point                             | not determined                    |
| Evaporation rate                        | not determined                    |
| Flammability (solid, gas)               | non-combustible                   |
| Explosive limits                        | not determined                    |
| Vapour pressure                         | not determined                    |
| Density                                 | 1.08 g/cm <sup>3</sup> at 20 °C   |
| Vapour density                          | this information is not available |

### Solubility(ies)

|                    |                            |
|--------------------|----------------------------|
| - Water solubility | miscible in any proportion |
|--------------------|----------------------------|

### Partition coefficient

|                             |                                   |
|-----------------------------|-----------------------------------|
| - n-octanol/water (log KOW) | this information is not available |
|-----------------------------|-----------------------------------|

|                           |                |
|---------------------------|----------------|
| Auto-ignition temperature | not determined |
| Viscosity                 | not determined |
| Explosive properties      | none           |
| Oxidising properties      | none           |

### 9.2 Other information

Of no significance.

there is no additional information

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

### 10.2 Chemical stability

See below "Conditions to avoid".

### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

### 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

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### 10.5 Incompatible materials

Oxidisers

Release of toxic gases in contact with:

Acids

### 10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity

Shall not be classified as acutely toxic.

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity (STOT)

Shall not be classified as a specific target organ toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

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### SECTION 12: Ecological information

#### 12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

#### 12.2 Persistence and degradability

Data are not available.

#### 12.3 Bioaccumulative potential

Data are not available.

#### 12.4 Mobility in soil

Data are not available.

#### 12.5 Results of PBT and vPvB assessment

Data are not available.

#### 12.6 Other adverse effects

Data are not available.

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

#### Relevant provisions relating to waste

Properties of waste which render it hazardous

HP 12 release of an acute toxic gas

##### - Product

06 03 14 solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13

##### - Product residues

06 03 14 solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13

##### - Packagings

15 01 02 plastic packaging

15 01 10x packaging containing residues of or contaminated by dangerous substances

#### Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.



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**SECTION 14: Transport information**

- 14.1 UN number** not subject to transport regulations
- 14.2 UN proper shipping name** not relevant
- 14.3 Transport hazard class(es)** none
- 14.4 Packing group** not assigned to a packing group
- 14.5 Environmental hazards** non-environmentally hazardous acc. to the dangerous goods regulations
- 14.6 Special precautions for user**  
There is no additional information.
- 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code**  
The cargo is not intended to be carried in bulk.

**Information for each of the UN Model Regulations**

**Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)**

Not subject to ADR, RID and ADN.

**International Maritime Dangerous Goods Code (IMDG)**

Not subject to IMDG.

**International Civil Aviation Organization (ICAO-IATA/DGR)**

Not subject to ICAO-IATA.

**SECTION 15: Regulatory information**

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

**Relevant provisions of the European Union (EU)**

**Restrictions according to REACH, Annex XVII**

| Dangerous substances with restrictions (REACH, Annex XVII) |  |        |             |    |
|--|--|--------|-------------|----|
| Name of substance  | Name acc. to inventory   | CAS No | Restriction | No |
| Gold bath AGC Micro, gold bath AGC Micro Vision            | this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC |        | R3          | 3  |

**Legend**

- R3
1. Shall not be used in:
    - ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
    - tricks and jokes,
    - games for one or more participants, or any article intended to be used as such, even with ornamental aspects,
  2. Articles not complying with paragraph 1 shall not be placed on the market.
  3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they:
    - can be used as fuel in decorative oil lamps for supply to the general public, and,
    - present an aspiration hazard and are labelled with R65 or H304,
  4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).
  5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:
    - (a) lamp oils, labelled with R65 or H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: 'Keep lamps filled with this liquid out of the reach of children'; and, by 1 December 2010, 'Just a sip of lamp oil - or even sucking the wick of lamps - may lead to life-threatening lung damage';
    - (b) grill lighter fluids, labelled with R65 or H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: 'Just a sip of grill lighter may lead to life threatening lung damage';
    - (c) lamp oils and grill lighters, labelled with R65 or H304, intended for supply to the general public are packaged in black

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Legend

opaque containers not exceeding 1 litre by 1 December 2010.

6. No later than 1 June 2014, the Commission shall request the European Chemicals Agency to prepare a dossier, in accordance with Article 69 of the present Regulation with a view to ban, if appropriate, grill lighter fluids and fuel for decorative lamps, labelled R65 or H304, intended for supply to the general public.

7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with R65 or H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled R65 or H304 to the competent authority in the Member State concerned. Member States shall make those data available to the Commission.

**Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II**

none of the ingredients are listed

**Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD)**

none of the ingredients are listed

**15.2 Chemical Safety Assessment**

For this substance a chemical safety assessment has been carried out.

**SECTION 16: Other information**

**Abbreviations and acronyms**

| Abbr.      | Descriptions of used abbreviations  |
|------------|---|
| ADN        | Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways) |
| ADR        | Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)                                       |
| CAS        | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)  |
| CLP        | Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures  |
| DGR        | Dangerous Goods Regulations (see IATA/DGR)  |
| EC No      | The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)                                     |
| EINECS     | European Inventory of Existing Commercial Chemical Substances   |
| ELINCS     | European List of Notified Chemical Substances   |
| Eye Dam.   | Seriously damaging to the eye   |
| Eye Irrit. | Irritant to the eye   |
| GHS        | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations   |
| IATA       | International Air Transport Association   |
| IATA/DGR   | Dangerous Goods Regulations (DGR) for the air transport (IATA)  |
| ICAO       | International Civil Aviation Organization   |
| IMDG       | International Maritime Dangerous Goods Code   |
| index No   | The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008  |
| MARPOL     | International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")   |
| NLP        | No-Longer Polymer   |
| PBT        | Persistent, Bioaccumulative and Toxic   |
| REACH      | Registration, Evaluation, Authorisation and Restriction of Chemicals  |

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| Abbr.       | Descriptions of used abbreviations  |
|-------------|---|
| RID         | Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail) |
| Skin Corr.  | Corrosive to skin   |
| Skin Irrit. | Irritant to skin  |
| vPvB        | Very Persistent and very Bioaccumulative  |

**Key literature references and sources for data**

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

**Classification procedure**

Health hazards. Environmental hazards. The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

**List of relevant phrases (code and full text as stated in chapter 2 and 3)**

| Code | Text                           |
|------|--------------------------------|
| H315 | Causes skin irritation.        |
| H319 | Causes serious eye irritation. |

**Disclaimer**

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.