

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

Printing date: 03.06.2022

Version number 2

Revision: 02.06.2022

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

· **1.1 Product identifier**

· **Trade name:** Colour gold bath FG 300 RT brightgold, 1 g Au/l
Farbgoldbad FG 300 RT hellgelb, 1 g Au/l

· **Article number:**

81020705
81020712 = 1 Liter

· **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:**

Heimerle + Meule GmbH
Dennigstrasse 16
D-75179 Pforzheim

Telefon +49 (0) 7231 940-0
Telefax +49 (0) 7231 940-2199
www.heimerle-meule.com

· **Further information obtainable from:**

Abteilung BASU - Bau/Arbeitssicherheit/Umwelt
Department BASU - Construction / Occupational Safety / Environment
sds@heimerle-meule.com

IATA - 24h Emergency Contact - IATA - 24h Emergency Contact -
(Dangerous goods emergency number)
+49 172 739 6970

· **1.4 Emergency telephone number:**

DEUTSCHLAND - GERMANY:

Vergiftungs-Informationen-Zentrale Freiburg, ++49 761 19240 (24 h)
(Poisoning Information Center)

GREAT BRITAIN:

National Poisons Information Service +44 121 507 4123
Members of the public seeking specific information on poisons should contact:
In England and Wales: NHS 111 - dial 111 - In Scotland: NHS 24 - dial 111

ITALY:

Istituto Superiore di Sanità +3906499906140

KROATIA - REPUBLIKA HRVATSKA:

(+385) 01 2348 342

ESTLAND - ESTONIA:

Tervisemeti Mürgistusteabekeskuse 16662, (+342) 7914 794

LETTLAND - LATVIA:

Latvijas Vides, ģeoloģijas un meteoroloģijas centrs (+371) 670 32600

LITAUEN - LIETUVOS RESPUBLIKA:

Apsinuodijimų informacijos biuras +370 (85) 2362052

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SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

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

The product is not classified, according to the GB CLP regulation.

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









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- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008 Void**
- **Hazard pictograms Void**
- **Signal word Void**
- **Hazard statements Void**
- **Additional information:**
 EUH208 Contains Potassium dicyanoaurate. May produce an allergic reaction.
 EUH210 Safety data sheet available on request.
- **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 / Information on ingredients:**

CAS: 13967-50-5 EINECS: 237-748-4 Reg.nr.: 01-2120130777-52	Potassium dicyanoaurate -----  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	0.146%
CAS: 143-33-9 EINECS: 205-599-4 Index number: 006-007-00-5	sodium cyanide; Sodium cyanide 96/98 % -----  Acute Tox. 2, H300; Acute Tox. 1, H310; Acute Tox. 2, H330  Eye Dam. 1, H318  Aquatic Acute 1, H400; Aquatic Chronic 1, H410  Skin Irrit. 2, H315	<0.025%
CAS: 544-92-3 EINECS: 208-883-6 RTECS: GL 7150000	copper cyanide -----  Acute Tox. 2, H300; Acute Tox. 1, H310; Acute Tox. 2, H330  Aquatic Acute 1, H400; Aquatic Chronic 1, H410	<0.02%
CAS: 506-61-6 Reg.nr.: 01-2120753799-33-0001	potassium dicyanoargentate -----  Acute Tox. 2, H300; Acute Tox. 1, H310; Acute Tox. 2, H330  Met. Corr.1, H290; Skin Corr. 1A, H314; Eye Dam. 1, H318  Aquatic Acute 1, H400; Aquatic Chronic 1, H410	<0.025%

- **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:**
 Personal protection for the First Aider.
 Take affected persons out of danger area and lay down.
 Involve doctor immediately after a accident or unwell
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** If skin irritation continues, consult a doctor.
- **After eye contact:** Rinse opened eye for several minutes under running water.

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- **After swallowing:**
Drink plenty of water and provide fresh air. Call for a doctor immediately.
A person vomiting while laying on their back should be turned onto their side.
Rinse out mouth and then drink plenty of water.
- **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.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:**



Wear self-contained respiratory protective device.

Beware: Filter masks provide protection for a short period of time only. They should only be used in exceptional cases, that is if a small amount of the substance has spilled out or in order to fight spillages and fire

- **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
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.
Use respiratory protective device against the effects of fumes/dust/aerosol.
Only handle and refill product in closed systems.
- **6.2 Environmental precautions:** Dilute with plenty of water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **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.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Keep receptacles tightly sealed.
The usual precautionary measures are to be adhered to when handling chemicals.
Wear suitable respiratory protective device when decanting larger quantities without extractor facilities.
Do not dry clean dust covered objects and floors. Wash thoroughly with plenty of water.
- **Information about fire - and explosion protection:** No special measures required.

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- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
 Observe official regulations on storing packagings .
 Observe official regulations on storing packagings .
 Prevent any seepage into the ground.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** None.
- **Storage class:** 12
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

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

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

CAS: 13967-50-5 Potassium dicyanoaurate

MAK (Germany)	Long-term value: 2E mg/m ³ als CN
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CAS: 143-33-9 sodium cyanide

IOELV (European Union)	Short-term value: 5 mg/m ³ Long-term value: 1 mg/m ³ Skin; as cyanide
AGW (Germany)	Long-term value: 1 E mg/m ³ 5(II);EU, H, Y

CAS: 544-92-3 copper cyanide

MAK (Germany)	Long-term value: 2E mg/m ³ als CN
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CAS: 506-61-6 potassium dicyanoargentate

AGW (Germany)	Long-term value: 0.01E mg/m ³ 2(I);DFG,EU,10
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- **Regulatory information**
 MAK (Germany): MAK- und BAT-Liste
 IOELV (European Union): (EU) 2019/1831
 AGW (Germany): TRGS 900
- **Additional information:** The lists valid during the making were used as basis.

- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 The usual precautionary measures are to be adhered to when handling chemicals.
 Wash hands before breaks and at the end of work.
 Do not inhale gases / fumes / aerosols.
 According to EC Directive 89/686/EEC
- **Respiratory protection:**
 Beware: Filter masks provide protection for a short period of time only. They should only be used in exceptional cases, that is if a small amount of the substance has spilled out or in order to fight spillages and fire.
 according EN 14387
 according to EN 143
- **Protection of hands:**
 according to EN 374

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To avoid skin problems reduce the wearing of gloves to the required minimum.

Only use chemical-protective gloves with CE-labelling of category III.

Sensibilisation by the components in the glove materials is possible.

Check the permeability prior to each anewed use of the glove.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Prior to working with gloves the rubbing in with tanniferous skin-protecting agents for the avoidance of skin softening due to perspiration is recommended.

· **Material of gloves**

Chloroprene rubber, CR

Recommended thickness of the material: ≥ 0.65 mm

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.65 mm

· **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:**

Leather gloves

Strong material gloves

· **Eye protection:** Goggles recommended during refilling

· **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: Colourless

· **Odour:** Odourless

· **Odour threshold:** Not determined.

· **pH-value at 20°C (68°F):** 9–10

· **Change in condition**

Melting point/freezing point: Undetermined.

Initial boiling point and boiling range: 100°C (212°F)

· **Flash point:** Not applicable.

· **Flammability (solid, gas):** Not applicable.

· **Decomposition temperature:** Not determined.

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

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

· **Explosion limits:**

Lower: Not determined.

Upper: Not determined.

· **Vapour pressure:** Not determined.

· **Density at 20°C (68°F):** 1.03 g/cm³ (8.6 lbs/gal)

· **Relative density** Not determined.

· **Vapour density** Not determined.

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· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Fully miscible.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Solids content:	0.0 %
· 9.2 Other information	0.00 %

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** Reacts with acids, alkalis and oxidising agents.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

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

ATE (Acute Toxicity Estimates)

Oral	LD50	19,822 mg/kg (Rat)
Inhalative	LC50/4 h	34.2 mg/l (rat)

CAS: 13967-50-5 Potassium dicyanoaurate

Oral	LD50	29 mg/kg (Rat)
Inhalative	LC50/4 h	0.05 mg/l / (ATE) (rat)

CAS: 143-33-9 sodium cyanide

Oral	LD50	6.4 mg/kg (Rat)
	TD Lo	0.7 mg/kg (Human)
	LD Lo	2.8 mg/kg (Human)
Dermal	LD50	7.7 mg/kg (Kanninchen)
Inhalative	LC50/4 h	0.05 mg/l (ATE)

CAS: 544-92-3 copper cyanide

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

CAS: 506-61-6 potassium dicyanoargentate

Oral	LD50	5 mg/kg (ATE)
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Dermal	LD50	20.9 mg/kg (Rat)
Inhalative	LC50/4 h	0.05 mg/l (ATE)

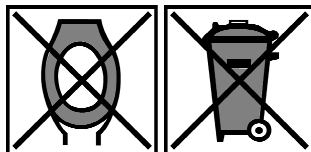
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **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.
- **Additional ecological information:**
- **General notes:** Not hazardous for water.
- **12.5 Results of PBT and vPvB assessment** Not applicable.
- **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**



Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Contact manufacturer for recycling information.

- **Waste disposal key:**
The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.
- **Uncleaned packaging:**
- **Recommendation:**
Disposal must be made according to official regulations.
Packaging which is uncleaned or soiled with product remains is to be treated like the product itself
Packaging free of product remains is to be supplied refuse for recycling. Only if no adequate collecting system is available, they may be disposed of through the domestic rubbish

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

SECTION 14: Transport information

· 14.1 UN-Number · ADR, IMDG, IATA	Void
· 14.2 UN proper shipping name · ADR, IMDG, IATA	Void
· 14.3 Transport hazard class(es) · ADR, ADN, IMDG, IATA · Class	Void
· 14.4 Packing group · ADR, IMDG, IATA	Void
· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user	Not applicable.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· IATA	
· Remarks:	24h emergency contact - (Dangerous goods emergency number) +49 172 739 6970
· UN "Model Regulation":	Void

SECTION 15: Regulatory information

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

COUNCIL DIRECTIVE 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work (fourteenth individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC)

DIRECTIVE 2012/18/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC

· **GADSL - Global Automotive Declarable Substance List**

CAS: 13815-17-3	Tetraamminpalladium(II)-chlorid	D(FI)
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· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **National regulations:**

· **Waterhazard class:** Generally not hazardous for water.

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

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· **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.

· **Reasons for revise**

If necessary, this safety data sheet can be revised according to legal guidelines.

Our current version for your reference is available on our website
www.heimerle-meule.com

· **Relevant phrases**

H290 May be corrosive to metals.
H300 Fatal if swallowed.
H310 Fatal in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H330 Fatal if inhaled.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

· **Department issuing SDS:**

Abteilung BASU - Bau/Arbeitssicherheit/Umwelt
Department BASU - Construction / Occupational Safety / Environment

sds@heimerle-meule.com

· **Contact:**

Herr Thomas Knuth
thomas.knuth@heimerle-meule.com
sds@heimerle-meule.com

· **Abbreviations and acronyms:**

AwSV: Ordinance on facilities for handling water-polluting substances (German regulation).
TRGS: Technical rules for hazardous substances (German regulation)
ADR: Accord relatif au transport international 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
vPvB: very Persistent and very Bioaccumulative
Met. Corr. 1: Corrosive to metals – Category 1
Acute Tox. 2: Acute toxicity – Category 2
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
Skin Sens. 1: Skin sensitisation – 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

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