

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

Printing date: 04.02.2021

Version number 1

Revision: _____ 27.01.2021

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

· **1.1 Product identifier**

· **Trade name:** Gold plating bath GP 205 S, 3 g Au/l
Goldplattierbad GP 205 S, 3 g Au/l

· **Article number:**

81024427
81024428 = 1Liter

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
Not approved for private consumers.

· **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

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

Printing date: 04.02.2021

Version number 1

Revision: _____ 27.01.2021

Trade name: Gold plating bath GP 205 S, 3 g Au/l
Goldplattierbad GP 205 S, 3 g Au/l

(Contd. of page 1)

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008



GHS06 skull and crossbones

Acute Tox. 2 H330 Fatal if inhaled.



GHS08 health hazard

Carc. 1A H350i May cause cancer by inhalation.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS05 corrosion

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

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Skin Sens. 1 H317 May cause an allergic skin reaction.

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



GHS05



GHS06



GHS08

- Signal word *Danger*

- Hazard-determining components of labelling:

Potassium tetracyanoaurate(III)

nickel sulphate

- Hazard statements

H302 Harmful if swallowed.

H330 Fatal if inhaled.

(Contd. on page 3)

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

Printing date: 04.02.2021

Version number 1

Revision: _____ 27.01.2021

Trade name: Gold plating bath GP 205 S, 3 g Au/l
Goldplattierbad GP 205 S, 3 g Au/l

(Contd. of page 2)

*H314 Causes severe skin burns and eye damage.**H317 May cause an allergic skin reaction.**H350i May cause cancer by inhalation.**H373 May cause damage to organs through prolonged or repeated exposure.**H412 Harmful to aquatic life with long lasting effects.***· Precautionary statements***P272 Contaminated work clothing should not be allowed out of the workplace.**P273 Avoid release to the environment.**P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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.**P310 Immediately call a POISON CENTER/doctor.**P320 Specific treatment is urgent (see on this label).**P362+P364 Take off contaminated clothing and wash it before reuse.**P405 Store locked up.**P501 Dispose of contents/container in accordance with local/regional/national/international regulations.***· Additional information:***Restricted to professional users.***· Labelling of packages where the contents do not exceed 125 ml****· Hazard pictograms**

GHS05



GHS06



GHS08

· Signal word Danger**· Hazard-determining components of labelling:***Potassium tetracyanoaurate(III)**nickel sulphate***· Hazard statements***H330 Fatal if inhaled.**H314 Causes severe skin burns and eye damage.**H317 May cause an allergic skin reaction.**H350i May cause cancer by inhalation.**H412 Harmful to aquatic life with long lasting effects.***· Precautionary statements***P272 Contaminated work clothing should not be allowed out of the workplace.**P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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.**P310 Immediately call a POISON CENTER/doctor.**P320 Specific treatment is urgent (see on this label).**P362+P364 Take off contaminated clothing and wash it before reuse.**P405 Store locked up.**P501 Dispose of contents/container in accordance with local/regional/national/international regulations.***· 2.3 Other hazards****· Results of PBT and vPvB assessment****· PBT:** Not applicable.

(Contd. on page 4)

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

Printing date: 04.02.2021

Version number 1

Revision: _____ 27.01.2021

Trade name: Gold plating bath GP 205 S, 3 g Au/l
Goldplattierbad GP 205 S, 3 g Au/l

(Contd. of page 3)

· **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: 10043-35-3 EINECS: 233-139-2 Index number: 005-007-00-2 RTECS: ED 4550000 Reg.nr.: 01-2119486683-25	boric acid; boric acid, crude natural, containing not more than 85 per cent of H ₃ BO ₃ calculated on the dry weight ----- ☠ Repr. 1B, H360FD Specific concentration limit: Repr. 1B; H360: C ≥ 5.5 %	1–2.5%
CAS: 7664-93-9 EINECS: 231-639-5 Index number: 016-020-00-8 Reg.nr.: 01-2119453338-20	Sulphuric acid; Sulphuric acid 96 % chemically pure; sulfuric acid ----- ☠ Met. Corr. 1, H290; Skin Corr. 1A, H314 Specific concentration limits: Skin Corr. 1A; H314: C ≥ 15 % Skin Irrit. 2; H315: 5 % ≤ C < 15 % Eye Irrit. 2; H319: 5 % ≤ C < 15 %	0.5–1%
CAS: 14263-59-3 EINECS: 238-145-9	Potassium tetracyanoaurate(III) ----- ☠ Acute Tox. 2, H300; Acute Tox. 1, 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	0.519%
CAS: 7786-81-4 EINECS: 232-104-9 Index number: 028-009-00-5	nickel sulphate; nickel sulfate ----- ☠ 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 Specific concentration limits: STOT RE 1; H372: C ≥ 1 % STOT RE 2; H373: 0.1 % ≤ C < 1 % Skin Irrit. 2; H315: C ≥ 20 % Skin Sens. 1; H317: C ≥ 0.01 %	≥0.25–<0.3%

· **SVHC**

CAS: 10043-35-3 | boric acid

· **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:**

Immediately remove any clothing soiled by the product.

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

Remove breathing equipment only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

Personal protection for the First Aider.

Take affected persons out of danger area and lay down.

Involve doctor immediately after a accident or unwell

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date: 04.02.2021

Version number 1

Revision: _____ 27.01.2021

Trade name: Gold plating bath GP 205 S, 3 g Au/l
Goldplattierbad GP 205 S, 3 g Au/l

(Contd. of page 4)

- **After inhalation:**
 Supply fresh air or oxygen; call for doctor.
 In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
 Immediately wash with water and soap and rinse thoroughly.
 Immediately rinse with water.
 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:**
 Call for a doctor immediately.
 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:**
 CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
 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**
 During heating or in case of fire poisonous gases are produced.
 Hydrogen cyanide (HCN)
- **5.3 Advice for firefighters**
- **Protective equipment:**
 Mount respiratory protective device.



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**
 Ensure adequate ventilation
 Keep people at a distance and stay on the windward side.
 Mount respiratory protective device.
 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:**
 Do not allow product to reach sewage system or any water course.

(Contd. on page 6)

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

Printing date: 04.02.2021

Version number 1

Revision: _____ 27.01.2021

Trade name: Gold plating bath GP 205 S, 3 g Au/l
Goldplattierbad GP 205 S, 3 g Au/l

(Contd. of page 5)

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

Dilute with plenty of water.

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 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

Ensure that suitable extractors are available on processing machines

Keep receptacles tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

the usual precautionary measures are to be adhered to when handling chemicals.

Prevent formation of aerosols.

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: *Keep respiratory protective device available.*

· 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:

Do not store together with acids.

Store away from foodstuffs.

· Further information about storage conditions:

Keep container tightly sealed.



Store under lock and key and with access restricted to technical experts or their assistants only.

Store under lock and key and out of the reach of children.

· Storage class: 6.1 B

· 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.*

(Contd. on page 7)

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

Printing date: 04.02.2021

Version number 1

Revision: _____ 27.01.2021

Trade name: Gold plating bath GP 205 S, 3 g Au/l
Goldplattierbad GP 205 S, 3 g Au/l

(Contd. of page 6)

· Ingredients with limit values that require monitoring at the workplace:	
CAS: 10043-35-3 boric acid	
AGW (Germany)	Long-term value: 0.5* mg/m ³ 2(I); *einatembar; AGS, Y, 10
CAS: 7664-93-9 Sulphuric acid	
IOELV (European Union)	Long-term value: 0.05 mg/m ³
AGW (Germany)	Long-term value: 0.1 E mg/m ³ 1(I); DFG, EU, Y
CAS: 7786-81-4 nickel sulphate	
WEL (Great Britain)	Long-term value: 0.1 mg/m ³ as Ni; Sk; Carc; Sen
AGW (Germany)	Long-term value: 0.030E mg/m ³ 8(II); AGS, Sh, Y, 10, 24, 31
TRGS 910 (Germany)	Short-term value: 0.006 (A) mg/m ³ Long-term value: 0.006 (A) mg/m ³ 8, Konzentrationen beziehen sich auf Ni-Gehalt

· Regulatory information

AGW (Germany): TRGS 900

IOELV (European Union): (EU) 2019/1831

WEL (Great Britain): EH40/2020

· **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.

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.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

According to EC Directive 89/686/EEC

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use 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.

according EN 14387

according to EN 143

· Recommended filter device for short term use:

Combination filter B-P3

Combinationfilter ABEK-P3

· Protection of hands:

Protective gloves

according to EN 374

(Contd. on page 8)

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

Printing date: 04.02.2021

Version number 1

Revision: _____ 27.01.2021

Trade name: Gold plating bath GP 205 S, 3 g Au/l
Goldplattierbad GP 205 S, 3 g Au/l

(Contd. of page 7)

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 renewed 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**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Natural rubber, NR

Recommended thickness of the material: ≥ 1.0 mm

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.4 mm

· **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.

The determined penetration times according to EN 16523-1:2015 are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

For the mixture of chemicals mentioned below the penetration time has to be at least 480 minutes (Permeation according to EN 374 Part 3: Level 3).

Value for the permeation: Level ≤ 3

· **Not suitable are gloves made of the following materials:**

Leather gloves

Strong material gloves

· **Eye protection:**



Tightly sealed goggles

according to EN 166

· **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: Blue

· **Odour:** Characteristic

· **Odour threshold:** Not determined.

· **pH-value at 20°C (68°F):** 1.5

· **Change in condition**

Melting point/freezing point: Undetermined.

Initial boiling point and boiling range: 100°C (212°F) (CAS: 7732-18-5 water, distilled, conductivity or of similarpurity)

(Contd. on page 9)

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

Printing date: 04.02.2021

Version number 1

Revision: _____ 27.01.2021

Trade name: Gold plating bath GP 205 S, 3 g Au/l
Goldplattierbad GP 205 S, 3 g Au/l

(Contd. of page 8)

· 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 at 20°C (68°F):	23 hPa (17.3 mm Hg) (CAS: 7732-18-5 water, distilled, conductivity or of similarpurity)
· Density at 20°C (68°F):	1.03 g/cm ³ (8.6 lbs/gal)
· Relative density	Not determined.
· Vapour density	Not determined.
· 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.
· 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**
Harmful if swallowed.
Fatal if inhaled.

· LD/LC50 values relevant for classification:

ATE (Acute Toxicity Estimates)

Oral	LD50	963 mg/kg
Inhalative	LC50/4 h	0.96 mg/l

Inhalative	LC50/4 h	0.96 mg/l
------------	----------	-----------

CAS: 10043-35-3 boric acid

Oral	LD50	2,660 mg/kg (rat)
------	------	-------------------

(Contd. on page 10)

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

Printing date: 04.02.2021

Version number 1

Revision: _____ 27.01.2021

Trade name: Gold plating bath GP 205 S, 3 g Au/l
Goldplattierbad GP 205 S, 3 g Au/l

(Contd. of page 9)

CAS: 14263-59-3 Potassium tetracyanoaurate(III)

Oral	LD50	5 mg/kg (ATE)
Inhalative	LC50/4 h	0.005 mg/l (ATE)

CAS: 7786-81-4 nickel sulphate

Oral	LD50	500 mg/kg (ATE)
Inhalative	LC50/4 h	1.5 mg/l (ATE)

- **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**
May cause an allergic skin reaction.
- **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**
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**
May cause damage to organs through prolonged or repeated exposure.
- **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:**
-
- 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.
Harmful to aquatic organisms
- **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.

GB

(Contd. on page 11)

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

Printing date: 04.02.2021

Version number 1

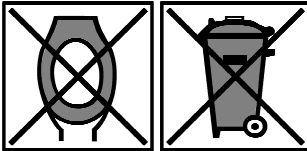
Revision: _____ 27.01.2021

Trade name: Gold plating bath GP 205 S, 3 g Au/l
Goldplattierbad GP 205 S, 3 g Au/l

(Contd. of page 10)

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.

- **European waste catalogue**

There are no uniform EC regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding laws and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste

11 00 00	WASTES FROM CHEMICAL SURFACE TREATMENT AND COATING OF METALS AND OTHER MATERIALS; NON-FERROUS HYDRO-METALLURGY
11 01 00	wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphating, alkaline degreasing, anodising)
11 01 98*	other wastes containing hazardous substances
HP6	Acute Toxicity
HP7	Carcinogenic
HP10	Toxic for reproduction
HP14	Ecotoxic

- **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

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

SECTION 14: Transport information

- 14.1 UN-Number

- ADR, IMDG, IATA

UN3289

- 14.2 UN proper shipping name

- ADR

UN3289 TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S. (SULPHURIC ACID, Potassium tetracyanoaurate(III))

- IMDG, IATA

TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S. (SULPHURIC ACID, Potassium tetracyanoaurate(III))

(Contd. on page 12)

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

Printing date: 04.02.2021

Version number 1

Revision: _____ 27.01.2021

Trade name: Gold plating bath GP 205 S, 3 g Au/l
Goldplattierbad GP 205 S, 3 g Au/l

(Contd. of page 11)

· 14.3 Transport hazard class(es)

· ADR



· Class 6.1 Toxic substances.
· Label 6.1+8

· IMDG



· Class 6.1 Toxic substances.
· Label 6.1/8

· IATA



· Class 6.1 Toxic substances.
· Label 6.1 (8)

· 14.4 Packing group

· ADR, IMDG, IATA II

· 14.5 Environmental hazards: Not applicable.

· 14.6 Special precautions for user Warning: Toxic substances.
· Hazard identification number (Kemler code): 68
· EMS Number: F-A,S-B
· Stowage Category B
· Stowage Code SW2 Clear of living quarters.

· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable.

· Transport/Additional information:

· ADR
· Limited quantities (LQ) 100 ml
· Excepted quantities (EQ) Code: E4
Maximum net quantity per inner packaging: 1 ml
Maximum net quantity per outer packaging: 500 ml
· Transport category 2
· Tunnel restriction code D/E

(Contd. on page 13)

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

Printing date: 04.02.2021

Version number 1

Revision: _____ 27.01.2021

Trade name: Gold plating bath GP 205 S, 3 g Au/l
Goldplattierbad GP 205 S, 3 g Au/l

(Contd. of page 12)

· IMDG	
· Limited quantities (LQ)	100 ml
· Excepted quantities (EQ)	Code: E4
	Maximum net quantity per inner packaging: 1 ml
	Maximum net quantity per outer packaging: 500 ml

· IATA	
· Remarks:	24h emergency contact - (Dangerous goods emergency number)
	+49 172 739 6970
· UN "Model Regulation":	UN 3289 TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S. (SULPHURIC ACID, POTASSIUM TETRACYANOAUATE(III)), 6.1 (8), II

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

· TSCA (Toxic Substances Control Act)

All ingredients are listed.

· GADSL - Global Automotive Declarable Substance List

CAS: 10043-35-3	boric acid	D/P(LR)
CAS: 7786-81-4	nickel sulphate	D(FI)

· Directive 2012/18/EU

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

· **Seveso category H2 ACUTE TOXIC**

· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 50 t

· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t

· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 27, 28

· DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

· National regulations:

· Information about limitation of use:

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation.

Exceptions can be made by the authorities in certain cases.

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

Employment restrictions concerning women of child-bearing age must be observed.

(Contd. on page 14)

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

Printing date: 04.02.2021

Version number 1

Revision: _____ 27.01.2021

Trade name: Gold plating bath GP 205 S, 3 g Au/l
Goldplattierbad GP 205 S, 3 g Au/l

(Contd. of page 13)

· **Waterhazard class:** .· **Other regulations, limitations and prohibitive regulations -**· **Substances of very high concern (SVHC) according to REACH, Article 57**

CAS: 10043-35-3	boric acid
-----------------	------------

· **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.

H302 Harmful if swallowed.

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.

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.

H360FD May damage fertility. 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.

· **Department issuing SDS:**

Abteilung BASU - Bau/Arbeitssicherheit/Umwelt

Department BASU - Construction / Occupational Safety / Environment

sds@heimerle-meule.com

· **Contact:**

Herr Thomas Knuth

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 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

(Contd. on page 15)

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

Printing date: 04.02.2021

Version number 1

Revision: _____ 27.01.2021

Trade name: Gold plating bath GP 205 S, 3 g Au/l
Goldplattierbad GP 205 S, 3 g Au/l

(Contd. of page 14)

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 - oral – Category 2
 Acute Tox. 4: Acute toxicity - oral – Category 4
 Acute Tox. 1: Acute toxicity - inhalation – 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. 1A: Carcinogenicity – Category 1Ai
 Repr. 1B: Reproductive toxicity – Category 1B
 Repr. 1B: Reproductive toxicity – Category 1B
 STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
 STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
 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.**

GB