

Trade name: Gold Plating Bath JE252 Au/Fe - 4 g/L Au

Version: 1 / WORLD

Date revised: 31.03.2025

Substance number: 7256.0000

Replaces Version: - / WORLD

Print date: 01.04.2025

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

1.1. Product identifier

Gold Plating Bath JE252 Au/Fe - 4 g/L Au

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

Use of the substance/preparation

Galvanic Bath, do not use for private purposes. Food, beverages and animal feed.

Identified Uses

PC14

Metal surface treatment products, including galvanic and electroplating products

1.3. Details of the supplier of the safety data sheet

Address/Manufacturer

Jentner Plating Technology GmbH

Johann-Staib-Straße 2

75179 Pforzheim

Telephone no. +49 (0)7231/4180940

Information provided by / telephone Laboratory department; Opening hours 8:00-16:00

E-mail address of person responsible sales@jentner.de

for this SDS

1.4. Emergency telephone number

Poisoning Information Center Freiburg: +49(0)761/19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (Regulation (EC) No. 1272/2008)

Classification (Regulation (EC) No. 1272/2008)

Skin Corr. 1B H314

Eye Dam. 1 H318

Aquatic Chronic 3 H412

The product is classified and labelled in accordance with Regulation (EC) No 1272/2008

For explanation of abbreviations see section 16.

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms



Signal word

Danger

Hazard statements

H314

Causes severe skin burns and eye damage.

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.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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 or doctor.
P501.1 Dispose of contents/container to industrial incineration plant.

Hazardous component(s) to be indicated on label (Regulation (EC) No. 1272/2008)

contains potassium hydroxide
EUH208 Contains Potassium gold-I-cyanid (68,2% Au), May produce an allergic reaction.

2.3. Other hazards

No special hazards have to be mentioned.

The product contains no PBT substances. The product contains no vPvB substances. This product does not contain a substance that has endocrine disrupting properties with respect to human. The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

SECTION 3: Composition/information on ingredients**Hazardous ingredients****Citric acid, monohydrate**

CAS No. 5949-29-1
EINECS no. 201-069-1
Registration no. 01-2119457026-42
Concentration ≥ 1 < 10 %
Classification (Regulation (EC) No. 1272/2008)
Eye Irrit. 2 H319
STOT SE 3 H335

potassium hydroxide

CAS No. 1310-58-3
EINECS no. 215-181-3
Registration no. 01-2119487136-33
Concentration ≥ 2 < 2,9 %
Classification (Regulation (EC) No. 1272/2008)
Acute Tox. 4 H302
Skin Corr. 1A H314
Met. Corr. 1 H290

Concentration limits (Regulation (EC) No. 1272/2008)

Eye Irrit. 2 H319 $\geq 0,5 < 2$ %
Skin Corr. 1A H314 ≥ 5 %
Skin Corr. 1B H314 $\geq 2 < 5$ %
Skin Irrit. 2 H315 $\geq 0,5 < 2$ %

ATE oral 333 mg/kg

Potassium gold-I-cyanid (68,2% Au)

CAS No. 13967-50-5
EINECS no. 237-748-4
Registration no. 01-2120130777-52
Concentration $\geq 0,25$ < 0,85 %
Classification (Regulation (EC) No. 1272/2008)
Met. Corr. 1 H290
Skin Irrit. 2 H315

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Eye Dam. 1	H318
Aquatic Chronic 1	H410
Acute Tox. 2	H300
Acute Tox. 2	H330
Aquatic Acute 1	H400
Skin Sens. 1	H317

ATE	oral	29	mg/kg
cATpE	inhalative, Dust/Mist	0,05	mg/l

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated, soaked clothing immediately and dispose of safely. Adhere to personal protective measures when giving first aid. Clean body thoroughly (bath, shower). In any case show the physician the Safety Data Sheet.

After inhalation

Ensure supply of fresh air. When vapours are intensively inhaled, seek medical help immediately.

After skin contact

Wash off immediately with soap and water. Take medical treatment.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). Summon a doctor immediately.

After ingestion

If swallowed, seek medical advice immediately and show this container or label. Rinse mouth thoroughly with water. Let plenty of water be drunk in small gulps. Do not induce vomiting.

Adhere to personal protective measures when giving first aid

First aider: Pay attention to self-protection!

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

Until now no symptoms known so far.

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

Hints for the physician / hazards

In the case of swallowing with subsequent vomiting, aspiration of the lungs can occur which can lead to chemical pneumonia or asphyxiation.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Dry powder

Non suitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of combustion evolution of dangerous gases possible.

5.3. Advice for firefighters

Special protective equipment for fire-fighting

Do not inhale explosion and/or combustion gases. In case of combustion use a suitable breathing apparatus.

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Other information

Collect contaminated fire-fighting water separately, must not be discharged into the drains. Fire residues and contaminated fire-fighting water must be disposed of in accordance with the local regulations.

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

Avoid contact with skin, eyes and clothing. Refer to protective measures listed in Sections 7 and 8.

6.2. Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers). Do not discharge into the drains/surface waters/groundwater. In case the product spills into sewage waters, immediately inform the authorities.

6.3. Methods and material for containment and cleaning up

Pick up with absorbent material. Dispose of absorbed material in accordance with the regulations.

6.4. Reference to other sections

Refer to protective measures listed in Sections 7 and 8.

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

Avoid formation of aerosols. Perform filling operations only at stations with exhaust ventilation facilities. Provide suitable exhaust ventilation at the processing machines. Keep container tightly closed.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep in original packaging, tightly closed. Storage rooms must be properly ventilated. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Provide solvent-resistant and impermeable floor.

Storage classes

Storage class according to TRGS 510 8B

Non-combustible corrosive hazardous substances

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Other information**

Contains no substances with occupational exposure limit values.

Derived No/Minimal Effect Levels (DNEL/DMEL)**potassium hydroxide**

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	= 1	mg/m ³

Potassium gold-I-cyanid (68,2% Au)

Type of value	Derived No Effect Level (DNEL)	
Route of exposure	dermal	
Mode of action	Chronic effects	
Concentration	= 0,1	mg/kg

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Type of value	Derived No Effect Level (DNEL)	
Route of exposure	inhalative	
Mode of action	Chronic effects	
Concentration	= 0,071	mg/m ³

Predicted No Effect Concentration (PNEC)**Potassium gold-I-cyanid (68,2% Au)**

Type of value	PNEC	
Type	Freshwater	
Concentration	= 0,2	µg/l
Type of value	PNEC	
Type	Freshwater sediment	
Concentration	= 0,33	mg/kg
Type of value	PNEC	
Type	Water (intermittent release)	
Concentration	= 2	µg/l
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	= 6	mg/l
Type of value	PNEC	
Type	Soil	
Concentration	= 0,067	mg/kg
Type of value	PNEC	
Type	Saltwater	
Concentration	= 0,02	µg/l
Type of value	PNEC	
Type	Marine sediment	
Concentration	= 0,033	mg/kg

8.2. Exposure controls**General protective and hygiene measures**

Hold eye wash fountain available. Hold emergency shower available. Do not inhale gases/vapours/aerosols. Avoid contact with skin and eyes. Do not eat, drink or smoke during work time. Wash hands before breaks and after work. Clean skin thoroughly after work; apply skin cream.

Respiratory protection

If workplace limits are exceeded, a respiratory protection approved for this particular job must be worn.

Hand protection

Chemical resistant gloves
Appropriate Material neoprene

Eye protection

Safety glasses with side protection shield

Body protection

Clothing as usual in the chemical industry. Protective shoes

SECTION 9: Physical and chemical properties

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9.1. Information on basic physical and chemical properties**Physical state**

liquid

Colour

light green

Odour

odourless

Melting point

Remarks

not determined

Freezing point

Remarks

not determined

Boiling point or initial boiling point and boiling range

Remarks

not determined

Flammability

evaluation

not determined

Upper and lower explosive limits

Remarks

not determined

Flash point

Remarks

Not applicable

Ignition temperature

Remarks

not determined

Decomposition temperature

Remarks

not determined

pH value

Value

= 3,5 to 4,5

Viscosity

Remarks

not determined

Solubility(ies)

Remarks

not determined

Partition coefficient n-octanol/water (log value)

Remarks

not determined

Vapour pressure

Remarks

not determined

Density and/or relative density

Value

= 1,030 to 1,040 g/ml

Relative vapour density

Remarks

not determined

9.2. Other information**Odour threshold**

Remarks

not determined

Evaporation rate (ether = 1) :

Remarks

not determined

Solubility in water

Remarks

not determined

Explosive properties

evaluation

not determined

Oxidising properties

Remarks

not determined

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Other information

None known

SECTION 10: Stability and reactivity**10.1. Reactivity**

No hazardous reactions when stored and handled according to prescribed instructions.

10.2. Chemical stability

No hazardous reactions known.

10.3. Possibility of hazardous reactions

No hazardous reactions known.

10.4. Conditions to avoid

No hazardous reactions known.

10.5. Incompatible materials

None known

10.6. Hazardous decomposition products

Irritant gases/vapours

SECTION 11: Toxicological information**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute oral toxicity**

ATE	3.812,90	mg/kg
	89	

Method calculated value (Regulation (EC) No. 1272/2008)

Acute oral toxicity (Components)**potassium hydroxide**

Species	rat	
LD50	333	mg/kg

Potassium gold-I-cyanid (68,2% Au)

Species	rat	
LD50	= 29	mg/kg

Acute dermal toxicity

Remarks Based on available data, the classification criteria are not met.

Acute dermal toxicity (Components)**Potassium gold-I-cyanid (68,2% Au)**

Species	guinea pig	
LD50	= 5	mg/kg

Acute inhalational toxicity

ATE	8,5266	mg/l
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Administration/Form Dust/Mist

Method calculated value (Regulation (EC) No. 1272/2008)

Remarks Based on available data, the classification criteria are not met.

Acute inhalative toxicity (Components)**Potassium gold-I-cyanid (68,2% Au)**

Species	rat	
LC50	= 0,05	mg/l

Duration of exposure 4 h

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Skin corrosion/irritation

evaluation

corrosive

Remarks

The classification criteria are met.

Serious eye damage/irritation

evaluation

corrosive

Remarks

The classification criteria are met.

Sensitization

Remarks

Based on available data, the classification criteria are not met.

Subacute, subchronic, chronic toxicity

Remarks

not determined

Mutagenicity

Remarks

Based on available data, the classification criteria are not met.

Reproductive toxicity

Remarks

Based on available data, the classification criteria are not met.

Carcinogenicity

Remarks

Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity (STOT)**Single exposure**

Remarks

Based on available data, the classification criteria are not met.

Repeated exposure

Remarks

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2 Information on other hazards**Endocrine disrupting properties with respect to humans**

The product does not contain a substance that has endocrine disrupting properties with respect to humans.

Experience in practice

Inhalation may lead to irritation of the respiratory tract.

Other information

No toxicological data are available.

SECTION 12: Ecological information**12.1. Toxicity****General information**

not determined

12.2. Persistence and degradability**General information**

not determined

12.3. Bioaccumulative potential**General information**

not determined

Partition coefficient n-octanol/water (log value)

Remarks

not determined

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12.4. Mobility in soil**General information**

not determined

12.5. Results of PBT and vPvB assessment**General information**

not determined

Results of PBT and vPvB assessment

The product contains no PBT substances

The product contains no vPvB substances.

12.6 Endocrine disrupting properties**Endocrine disrupting properties with respect to the environment**

The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

12.7. Other adverse effects**General information**

not determined

General information / ecology

Do not allow to enter soil, waterways or waste water canal. Avoid release into the atmosphere.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations for the product**

Allocation of a waste code number, according to the European Waste Catalogue (EWC), should be carried out in agreement with the regional waste disposal company.

Disposal recommendations for packaging

Packaging that cannot be cleaned should be disposed off in agreement with the regional waste disposal company.

SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
14.1. UN number or ID number	The product does not constitute a hazardous substance in land transport.	The product does not constitute a hazardous substance in sea transport.	The product does not constitute a hazardous substance in air transport.
14.2. UN proper shipping name	-	-	-
14.3. Transport hazard class(es)	-	-	-
Label			
14.4. Packing group	-	-	-

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SECTION 15: Regulatory information

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

Other information

The product does not contain substances according to: Candidate List for inclusion in Annex XIV of Regulation (EC) No. 1907/2006 (REACH).

15.2. Chemical safety assessment

For this preparation a chemical safety assessment has not been carried out.

SECTION 16: Other information

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification (Regulation (EC) No. 1272/2008)

Skin Corr. 1B	H314	Calculation method
Eye Dam. 1	H318	Calculation method
Aquatic Chronic 3	H412	Calculation method

Hazard statements listed in Chapter 2/3

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.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

CLP categories listed in Chapter 2/3

Acute Tox. 2	Acute toxicity, Category 2
Acute Tox. 4	Acute toxicity, Category 4
Aquatic Acute 1	Hazardous to the aquatic environment, acute, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic, Category 3
Eye Dam. 1	Serious eye damage, Category 1
Eye Irrit. 2	Eye irritation, Category 2
Met. Corr. 1	Substance or mixture corrosive to metals, Category 1
Skin Corr. 1A	Skin corrosion, Category 1A
Skin Corr. 1B	Skin corrosion, Category 1B
Skin Irrit. 2	Skin irritation, Category 2
Skin Sens. 1	Skin sensitization, Category 1
STOT SE 3	Specific target organ toxicity - single exposure, Category 3

Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: ***
This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.