# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006



# Gold Bath 14ct JE270-1 for pen

Revision date: 15.08.2019 Product code: 6202 Page 1 of 9

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

#### 1.1. Product identifier

Gold Bath 14ct JE270-1 for pen

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

#### Use of the substance/mixture

Plating agents and metal surface treating agents

#### 1.3. Details of the supplier of the safety data sheet

Company name: Jentner Plating Technology GmbH

Street: Johann-Staib-Strasse 2
Place: D-75179 Pforzheim

Telephone: +49 (0)7231 418094 0 Telefax: +49 (0)7231 418094 77

e-mail: info@jentner.de

Contact person: Department of Chemistry

Internet: www.jentner.de

Responsible Department: Poison Information Center of the University of Freiburg.

**1.4. Emergency telephone** 0049 (0)761 19240 - 24 h german and english

number:

**Further Information** 

BfR Produktnummer: 6265839

#### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

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

Hazard categories:

Acute toxicity: Acute Tox. 2 Acute toxicity: Acute Tox. 3 Acute toxicity: Acute Tox. 4

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements: Fatal in contact with skin. Toxic if swallowed.

Toxic to aquatic life with long lasting effects.

### 2.2. Label elements

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

## Hazard components for labelling

salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex

Signal word: Danger

Pictograms:





## **Hazard statements**

H301 Toxic if swallowed.

H310 Fatal in contact with skin.

H332 Harmful if inhaled.

# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006



# Gold Bath 14ct JE270-1 for pen

Revision date: 15.08.2019 Product code: 6202 Page 2 of 9

H411 Toxic to aquatic life with long lasting effects.

#### **Precautionary statements**

D404	16	1 - 1 ' ' 1 - 1			Talast at last and
P101	it medica	Ladvice is needed.	nave product	container or	lanel at hand

P102 Keep out of reach of children.

P103 Read label before use.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P262 Do not get in eyes, on skin, or on clothing.

P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see 4.1 on this label).

P330 Rinse mouth.

P302+P352 IF ON SKIN: Wash with plenty of water.
P310 Immediately call a POISON CENTER/doctor.

P361+P364 Take off immediately all contaminated clothing and wash it before reuse.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER/doctor if you feel unwell.

P391 Collect spillage. P405 Store locked up.

P501 Dispose of contents/container to an officially registered waste disposal company.

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

## 3.2. Mixtures

#### **Hazardous components**

CAS No	Chemical name				
	EC No	Index No	REACH No		
	GHS Classification				
-	salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex				
	-	006-007-00-5			
	Acute Tox. 1, Acute Tox. 2, Acute Tox. 2, Aquatic Acute 1, Aquatic Chronic 1; H310 H330 H300 H400 H410 EUH032				

Full text of H and EUH statements: see section 16.

#### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

#### **General information**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). First aider: Pay attention to self-protection!

The following first aid and treatment recommendations should already be available to all first responders and doctors, before the work with cyanides. It can be used for First Aid performance. Act quickly and keep calm. Self-respect. Remove soiled or soaked clothing immediately and dispose safely. Leave the danger area. Possible signs of poisoning: headache, dizziness, drowsiness, nausea, convulsions, unconsciousness, respiratory disorders, respiratory arrest, cardiac arrest.dispose of safely. Concerned from the danger area. Possible signs of poisoning: headache, dizziness, drowsiness, nausea, convulsions, unconsciousness, respiratory disorders, respiratory arrest, cardiac arrest.

#### After inhalation

Move victim to fresh air. Put victim at rest and keep warm. Do not leave affected person unattended. After

# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006



# Gold Bath 14ct JE270-1 for pen

Revision date: 15.08.2019 Product code: 6202 Page 3 of 9

inhaling vapours, first symptoms of poisoning may develop hours later, so always consult a doctor.

#### After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Put victim at rest, cover with a blanket and keep warm. Do not leave affected person unattended. In case of breathing difficulties administer oxygen. If victim is at risk of losing consciousness, position and transport on their side.

#### After contact with eves

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

#### After ingestion

No direct artificial respiration to be given by first aider. Rinse mouth immediately and drink plenty of water. Call a physician immediately.

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

after ingestion: Headaches and dizziness may occur, proceeding to fainting or unconsciousness; large doses may result in coma and death.

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

Treatment as for cyanide poisoning. Attend attached additional text note. Eye Contact: Therapy as alkali burn.

## **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

#### Suitable extinguishing media

Extinguishing powder.

Foam.

#### Unsuitable extinguishing media

Extinguishing media which must not be used for safety reasons: Water spray. Carbon dioxide (CO2).

#### 5.2. Special hazards arising from the substance or mixture

Potassium oxide; Nitrogen oxides; Hydrogen cyanide, cyanogen. Decomposition begins at 200 ° C

#### 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

The product itself does not burn. Do not allow water used to extinguish fire to enter drains or waterways. Provide adequate fire-fighting water retention. Contaminated fire-fighting water must be disposed of according to local regulations. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required.

#### 6.2. Environmental precautions

Do not empty into drains; dispose of this material and its container in a safe way.

#### 6.3. Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal.

Retain contaminated washing water and dispose it.

## 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

#### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006



# Gold Bath 14ct JE270-1 for pen

Revision date: 15.08.2019 Product code: 6202 Page 4 of 9

#### Advice on safe handling

When using do not eat, drink, smoke, sniff.

The product should be handled only by trained personnel.

#### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep locked up and out of the reach of children.

Keep only in the original container in a cool, well-ventilated place away from acids.

Kept under lock and key so that only skilled persons have access.

#### Hints on joint storage

Do not store together with: Acid.

## Further information on storage conditions

Store in a place accessible by authorized persons only.

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

#### 8.1. Control parameters

#### Additional advice on limit values

To date, no national critical limit values exist.

#### 8.2. Exposure controls









#### Appropriate engineering controls

Additional information on plant design: Ensure suitable suction / aeration at the workplace or on the machines.

## Protective and hygiene measures

Do not eat, drink, smoke or sneeze at the workplace.

Wash hands before breaks and after work.

## **Hand protection**

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Thorough skin-cleansing after handling the product. After cleaning apply high-fat content skin care cream.

#### Skin protection

Use personal protection equipment.

# **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: clear
Odour: none

pH-Value (at 20 °C): 8-9

# Changes in the physical state

Initial boiling point and boiling range:

Sublimation point:

Thermal decomposition:

ca. 100 °C

not determined

=>200 °C

#### **Explosive properties**

not explosive.

# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006



# Gold Bath 14ct JE270-1 for pen

Revision date: 15.08.2019 Product code: 6202 Page 5 of 9

# **Oxidizing properties**

Not oxidising.

Density (at 20 °C): 1,04 g/cm<sup>3</sup>
Water solubility: unlimited

### Solubility in other solvents

not determined

Vapour density:

Evaporation rate:

Solvent separation test:

not determined
not determined
not applicable

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

There are no data available on the mixture itself.

#### 10.3. Possibility of hazardous reactions

Contact with acids releases toxic gases.

#### 10.4. Conditions to avoid

Acid, concentrated.

## 10.5. Incompatible materials

Contact with acids liberates very toxic gas.

# 10.6. Hazardous decomposition products

Hydrocyanic acid (hydrocyanic acid). Ammonia.

#### **Further information**

Absorbs carbon dioxide from the air, forming hydrogen cyanide

# **SECTION 11: Toxicological information**

# 11.1. Information on toxicological effects

## **Acute toxicity**

Fatal if swallowed.

Toxic in contact with skin or if inhaled.

#### **ATEmix calculated**

ATE (oral) 166,7 mg/kg; ATE (dermal) 166,7 mg/kg; ATE (inhalation vapour) 16,67 mg/l; ATE (inhalation aerosol) 1,667 mg/l

CAS No	Chemical name						
	Exposure route	Dose		Species	Source	Method	
	salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex						
	oral	ATE	5 mg/kg				
	dermal	ATE	5 mg/kg				
	inhalation vapour	ATE	0,5 mg/l				
	inhalation aerosol	ATE	0,05 mg/l				

#### Irritation and corrosivity

irritant.

# Sensitising effects

No information available.

# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006



# Gold Bath 14ct JE270-1 for pen

Revision date: 15.08.2019 Product code: 6202 Page 6 of 9

#### STOT-single exposure

No information available.

#### **STOT-repeated exposure**

No information available.

#### Specific effects in experiment on an animal

LD50 oral , Ratte: 25< LD50 =<200 mg/kg

The statement is derived from the properties of the single components.

# **SECTION 12: Ecological information**

## 12.1. Toxicity

Cyanide poisons are strong for all living things.

# 12.2. Persistence and degradability

There are no data available on the mixture itself.

#### 12.3. Bioaccumulative potential

not determined

#### 12.4. Mobility in soil

If product enters soil, it will be mobile and may contaminate groundwater.

#### 12.5. Results of PBT and vPvB assessment

Part of the components is biodegradable.

#### **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

#### Advice on disposal

Refer to manufacturer or supplier for information on recovery or recycling.

# Waste disposal number of waste from residues/unused products

110198 WASTES FROM CHEMICAL SURFACE TREATMENT AND COATING OF METALS AND OTHER

MATERIALS; NON-FERROUS HYDRO-METALLURGY; 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); other wastes containing

hazardous substances; hazardous waste

#### Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

Non-contaminated packages may be recycled.

## **SECTION 14: Transport information**

# Land transport (ADR/RID)

**14.1. UN number:** UN 1935

14.2. UN proper shipping name: CYANIDE SOLUTION, N.O.S. (Potassium dicyanoaurate(I))

14.3. Transport hazard class(es):6.114.4. Packing group:IIHazard label:6.1



Classification code: T4
Special Provisions: 274 525
Limited quantity: LQ17

# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006



Gold Bath 14ct JE270-1 for pen

Revision date: 15.08.2019 Product code: 6202 Page 7 of 9

Transport category: 2
Hazard No: 60
Tunnel restriction code: D/E

Other applicable information (land transport)

Special provisions: 274

É1 : 2 E4

Inland waterways transport (ADN)

**14.1. UN number:** UN 1935

14.2. UN proper shipping name: CYANIDE SOLUTION, N.O.S. (Potassium dicyanoaurate(I) )

14.3. Transport hazard class(es):6.114.4. Packing group:IIHazard label:6.1



Classification code: T4

Special Provisions: 274 525 802 Limited quantity: 100 mL

Other applicable information (inland waterways transport)

E4

Marine transport (IMDG)

**14.1. UN number:** UN 1935

14.2. UN proper shipping name: CYANIDE SOLUTION, N.O.S. (potassium dicyanoaurate(I))

14.3. Transport hazard class(es):6.114.4. Packing group:IIHazard label:6.1



Marine pollutant:

Special Provisions:

Limited quantity:

EmS:

P

274

100 mL

F-A, S-A

Other applicable information (marine transport)

E4

Air transport (ICAO-TI/IATA-DGR)

**14.1. UN number:** UN 1935

**14.2. UN proper shipping name:** CYANIDE SOLUTION, N.O.S. (potassium dicyanoaurate(I))

14.3. Transport hazard class(es):6.114.4. Packing group:IIHazard label:6.1



Limited quantity Passenger: 1 L

# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006



# Gold Bath 14ct JE270-1 for pen

Revision date: 15.08.2019 Product code: 6202 Page 8 of 9

IATA-packing instructions - Passenger: 654
IATA-max. quantity - Passenger: 5 L
IATA-packing instructions - Cargo: 661
IATA-max. quantity - Cargo: 60 L

#### Other applicable information (air transport)

E1 : Y611

Special provisions: A3 A4 A137

Ė4 : Y609 : Y641

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: yes



## **SECTION 15: Regulatory information**

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

## **EU** regulatory information

Information according to 2012/18/EU H2 ACUTE TOXIC

(SEVESO III):

#### **National regulatory information**

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile

work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or

nursing mothers.

Water contaminating class (D): 3 - highly water contaminating

#### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

#### **SECTION 16: Other information**

#### Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Acute Tox. 2; H310	Calculation method
Acute Tox. 3; H301	Calculation method
Acute Tox. 4; H332	Calculation method
Aquatic Chronic 2; H411	Calculation method

# Relevant H and EUH statements (number and full text) H300 Fatal if swallowed.

H30	1 T	oxic if swallowed.
H31	0 F	atal in contact with skin.
H33	0 F	atal if inhaled.
H33	2 F	larmful if inhaled.
H40	0 V	ery toxic to aquatic life.
H41	0 V	ery toxic to aquatic life with long lasting effects.
H41	1 T	oxic to aquatic life with long lasting effects.
EUF	1032 C	Contact with acids liberates very toxic gas.

# Jentner Plating Technology GmbH Safety Data Sheet

according to Regulation (EC) No 1907/2006



# Gold Bath 14ct JE270-1 for pen

Revision date: 15.08.2019 Product code: 6202 Page 9 of 9

#### **Further Information**

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singulary responsible for adhering to existing laws and regulations. The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)