

Trade name: Silver Bath JE60 cyanide free

Substance number: 10315.0000:

Version: 1 / WORLD

Date revised: 10.04.2026

Replaces Version: - / WORLD

Print date: 13.04.2026

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

1.1. Product identifier

Silver Bath JE60 cyanide free

UFI: SS80-T073-600M-9QFV

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, or 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, DE

Telephone no. +49 (0) 7231 4180940

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

by / telephone

E-mail address of sales@jentner.de

person responsible

for this SDS

1.4. Emergency telephone number

Emergency: +44 1865 407333 Transport code: JENTNERPLATINGTECH-29003

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

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

Ox. Liq. 2 H272

Skin Corr. 1A H314

Eye Dam. 1 H318

Aquatic Chronic 2 H411

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

Safety data sheet in accordance with regulation (EC) No 1907/2006

Trade name: Silver Bath JE60 cyanide free

Substance number: 10315.0000:

Version: 1 / WORLD

Date revised: 10.04.2026

Replaces Version: - / WORLD

Print date: 13.04.2026



Signal word

Danger

Hazard statements

H272 May intensify fire; oxidizer.
H314 Causes severe skin burns and eye damage.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P220 Keep away from clothing and other combustible materials.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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 or doctor.
P501.9 Dispose of contents/container as problematic waste.

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

contains potassium hydroxide; silver nitrate

2.3. Other hazards

Harmful in contact with skin and if swallowed.

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

heterocyclic amin

Concentration \geq 10 < 25 %
Classification (Regulation (EC) No. 1272/2008)
Skin Irrit. 2 H315

potassium hydroxide

CAS No. 1310-58-3
EINECS no. 215-181-3
Registration no. 01-2119487136-33
Concentration \geq 5 < 10 %
Classification (Regulation (EC) No. 1272/2008)
Acute Tox. 4 H302

Trade name: Silver Bath JE60 cyanide free

Substance number: 10315.0000:

Version: 1 / WORLD

Date revised: 10.04.2026

Replaces Version: - / WORLD

Print date: 13.04.2026

Skin Corr. 1A	H314
Met. Corr. 1	H290

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

Eye Irrit. 2	H319	>= 0,5 < 2 %
Skin Corr. 1A	H314	>= 5 %
Skin Corr. 1B	H314	>= 2 < 5 %
Skin Irrit. 2	H315	>= 0,5 < 2 %

ATE oral 333 mg/kg

silver nitrate

CAS No. 7761-88-8

EINECS no. 231-853-9

Registration no. 01-2119513705-43-XXXX

Concentration >= 5 < 10 %

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

Met. Corr. 1	H290
Ox. Liq. 2	H272
Skin Corr. 1B	H314
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

potassium compound

Concentration >= 1 < 10 %

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

Eye Irrit. 2	H319
--------------	------

2,2'-bipyridyl

CAS No. 366-18-7

EINECS no. 206-674-4

Concentration >= 0,1 < 0,48 %

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

Acute Tox. 3	H301
Acute Tox. 3	H311

ATE oral 100 mg/kg

ATE dermal 938 mg/kg

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

Safety data sheet in accordance with regulation (EC) No 1907/2006

Trade name: Silver Bath JE60 cyanide free

Substance number: 10315.0000:

Version: 1 / WORLD

Date revised: 10.04.2026

Replaces Version: - / WORLD

Print date: 13.04.2026

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.

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



Trade name: Silver Bath JE60 cyanide free

Substance number: 10315.0000:

Version: 1 / WORLD

Date revised: 10.04.2026

Replaces Version: - / WORLD

Print date: 13.04.2026

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 5.1B Oxidising 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

silver nitrate

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Route of exposure	inhalative	
Mode of action	Chronic effects	
Concentration	= 0,016	mg/m ³

Predicted No Effect Concentration (PNEC)

silver nitrate

Safety data sheet in accordance with regulation (EC) No 1907/2006

Trade name: Silver Bath JE60 cyanide free

Substance number: 10315.0000:

Version: 1 / WORLD

Date revised: 10.04.2026

Replaces Version: - / WORLD

Print date: 13.04.2026

Type of value	PNEC	
Type	Fresh water	
Conditions	Short term	
Species	Aquatic organisms	
Concentration	= 0,04	µg/l

Type of value	PNEC	
Type	Saltwater	
Conditions	Short term	
Species	Aquatic organisms	
Concentration	= 0,86	µg/l

Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Conditions	Short term	
Species	Aquatic organisms	
Concentration	= 0,025	mg/l

Type of value	PNEC	
Type	Sediment	
Conditions	Short term	
Species	Aquatic organisms	
Concentration	= 438,1	mg/kg

Type of value	PNEC	
Type	Marine sediment	
Conditions	Short term	
Species	Aquatic organisms	
Concentration	= 438,1	mg/kg

Type of value	PNEC	
Type	Soil	
Conditions	Short term	
Species	terrestrial organisms	
Concentration	= 1,41	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

Trade name: Silver Bath JE60 cyanide free

Substance number: 10315.0000:

Version: 1 / WORLD

Date revised: 10.04.2026

Replaces Version: - / WORLD

Print date: 13.04.2026

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

9.1. Information on basic physical and chemical properties

Physical state liquid

Colour colourless

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

Auto-ignition temperature

Remarks not determined

Decomposition temperature

Remarks not determined

pH value

Value = 9,8 to 10,2

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

Safety data sheet in accordance with regulation (EC) No 1907/2006

Trade name: Silver Bath JE60 cyanide free

Substance number: 10315.0000:

Version: 1 / WORLD

Date revised: 10.04.2026

Replaces Version: - / WORLD

Print date: 13.04.2026

Value = 1,12 to 1,20 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

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 4.531,228 mg/kg
7

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

Acute oral toxicity (Components)

Trade name: Silver Bath JE60 cyanide free

Substance number: 10315.0000:

Version: 1 / WORLD

Date revised: 10.04.2026

Replaces Version: - / WORLD

Print date: 13.04.2026

potassium hydroxide

Species rat
LD50 333 mg/kg

2,2'-bipyridyl

Species rat
LD50 = 100 mg/kg

silver nitrate

Species rat
LD50 > 2000 mg/kg
Source ECHA

Acute dermal toxicity

ATE > 10.000 mg/kg
Method calculated value (Regulation (EC) No. 1272/2008)

Acute dermal toxicity (Components)

2,2'-bipyridyl

Species monkey
LD50 = 938 mg/kg

2,2'-bipyridyl

Species rat
LD50 = 1250 mg/kg

silver nitrate

Species rat
LD50 > 2000 mg/kg
Source ECHA

Acute inhalational toxicity

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

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

Safety data sheet in accordance with regulation (EC) No 1907/2006

Trade name: Silver Bath JE60 cyanide free

Substance number: 10315.0000:

Version: 1 / WORLD

Date revised: 10.04.2026

Replaces Version: - / WORLD

Print date: 13.04.2026

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

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.

Trade name: Silver Bath JE60 cyanide free

Substance number: 10315.0000:

Version: 1 / WORLD

Date revised: 10.04.2026

Replaces Version: - / WORLD

Print date: 13.04.2026

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	3098	3098	3098
14.2. UN proper shipping name	OXIDIZING LIQUID, CORROSIVE, N.O.S., (silver nitrate, potassium hydroxide)	OXIDIZING LIQUID, CORROSIVE, N.O.S., (silver nitrate, potassium hydroxide)	OXIDIZING LIQUID, CORROSIVE, N.O.S., (silver nitrate, potassium hydroxide)
14.3. Transport hazard class(es)	5.1	5.1	5.1
Subsidiary risk	8	8	8
Label			
14.4. Packing group	II	II	II
Limited Quantity	1 l	1 l	0.5 L
Transport category	2		

Safety data sheet in accordance with regulation (EC) No 1907/2006

Trade name: Silver Bath JE60 cyanide free




Substance number: 10315.0000:

Version: 1 / WORLD

Date revised: 10.04.2026

Replaces Version: - / WORLD

Print date: 13.04.2026

14.5. Environmental hazards	 ENVIRONMENTALLY HAZARDOUS	 Marine Pollutant ENVIRONMENTALLY HAZARDOUS	 ENVIRONMENTALLY HAZARDOUS
Tunnel restriction code	E		

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) with a content of $\geq 0.1\%$ w/w.

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)

Ox. Liq. 2	H272	On basis of test data
Skin Corr. 1A	H314	Calculation method
Eye Dam. 1	H318	Calculation method
Aquatic Chronic 2	H411	Calculation method

Hazard statements listed in Chapter 2/3

H272	May intensify fire; oxidizer.
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

CLP categories listed in Chapter 2/3

Acute Tox. 3	Acute toxicity, Category 3
Acute Tox. 4	Acute toxicity, Category 4

Trade name: Silver Bath JE60 cyanide free

Substance number: 10315.0000:

Version: 1 / WORLD

Date revised: 10.04.2026

Replaces Version: - / WORLD

Print date: 13.04.2026

Aquatic Acute 1	Hazardous to the aquatic environment, acute, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic, Category 2
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
Ox. Liq. 2	Oxidising liquid, Category 2
Skin Corr. 1A	Skin corrosion, Category 1A
Skin Corr. 1B	Skin corrosion, Category 1B
Skin Irrit. 2	Skin irritation, Category 2

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.