

Trade name: Rotgoldplattierbad JE224 - 4 g/L Au

Version: Draft / DE

Date revised

Substance number: 7255.0000

Replaces Version: 2 / DE

Print date: 04.07.2024

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

1.1. Product identifier

Rotgoldplattierbad JE224 - 4 g/L Au

1.3. Details of the supplier of the safety data sheet

Address/Manufacturer

Jentner Plating Technology GmbH
Johann-Staib-Straße 2
75179 Pforzheim
Information provided Department product safety
by / telephone

1.4. Emergency telephone number

+49 761 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)
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 ***

Warning

Hazard statements

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.
P501.1 Dispose of contents/container to industrial incineration plant.

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

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Hazardous ingredients**Sodiumthiocyanate**

CAS No.	540-72-7			
EINECS no.	208-754-4			
Concentration	>= 1	<	10	%
Classification (Regulation (EC) No. 1272/2008)				
	Acute Tox. 4		H302	
	Acute Tox. 4		H312	
	Acute Tox. 4		H332	
	Aquatic Chronic 3		H412	

ATE	oral	764	mg/kg
cATpE	dermal	1.100	mg/kg
ATE	inhalative, Dust/Mist	1,5	mg/l

copper sulphate

CAS No.	7758-98-7			
EINECS no.	231-847-6			
Registration no.	01-2119520566-40-XXXX			
Concentration	>= 0,25	<	1	%
Classification (Regulation (EC) No. 1272/2008)				
	Acute Tox. 4		H302	
	Skin Irrit. 2		H315	
	Eye Irrit. 2		H319	
	Aquatic Acute 1		H400	
	Aquatic Chronic 1		H410	

Potassium dicyanoaurate (I)

CAS No.	13967-50-5			
EINECS no.	237-748-4			
Registration no.	01-2120130777-52			
Concentration	>= 0,25	<	1	%
Classification (Regulation (EC) No. 1272/2008)				
	Met. Corr. 1		H290	
	Skin Irrit. 2		H315	
	Eye Dam. 1		H318	
	Aquatic Chronic 1		H410	
			H300	
			H310	
			H330	
			EUH032	

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

In case of persistent symptoms consult doctor.

After inhalation

Ensure supply of fresh air. In the event of symptoms take medical treatment.

After skin contact

In case of contact with skin wash off with warm water. Consult a doctor if skin irritation persists.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). In case of irritation consult an oculist.

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After ingestion

Rinse out mouth and give plenty of water to drink.

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

Foam, Dry powder, Carbon dioxide, Water spray jet

5.3. Advice for firefighters

Special protective equipment for fire-fighting

In case of combustion use a suitable breathing apparatus.

Other information

Collect contaminated fire-fighting water separately, must not be discharged into the drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid dust formation.

6.3. Methods and material for containment and cleaning up

Pick up with absorbent material. Clean contaminated floors and objects thoroughly, observing environmental regulations. Dispose of as prescribed.

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

Observe the usual precautions for handling chemicals.

Advice on protection against fire and explosion

No special measures required.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Store product in closed containers.

Hints on storage assembly

Do not store together with foodstuffs.

Storage classes

Storage class according to TRGS 510 12 Non-combustible liquids



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Further information on storage conditions

Keep container tightly closed and dry.

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 dicyanoaurate (I)

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

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

copper sulphate

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

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

Type of value	Derived No Effect Level (DNEL)	
Reference group	Human	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	= 137	mg/kg/d

Sodiumthiocyanate

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

Type of value	Derived No Effect Level (DNEL)	
Reference group	Human	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	= 4,3	mg/kg/d

Predicted No Effect Concentration (PNEC)

Potassium dicyanoaurate (I)



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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

copper sulphate

Type of value	PNEC		
Type	Water		
Conditions	Short term		
Species	Microorganisms		
Concentration	= 7,8		µg/l
Type of value	PNEC		
Type	Saltwater		
Conditions	Short term		
Species	Microorganisms		
Concentration	= 5,2		µg/l
Type of value	PNEC		
Type	Sewage treatment plant (STP)		
Conditions	Short term		
Species	Microorganisms		
Concentration	= 230		µg/l
Type of value	PNEC		
Type	Sediment		
Conditions	Short term		
Species	Microorganisms		
Concentration	= 87		mg/kg
Type of value	PNEC		
Type	Marine sediment		
Conditions	Short term		
Species	Microorganisms		



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Concentration = 676 mg/kg

Type of value PNEC
 Type Soil
 Conditions Short term
 Species Microorganisms
 Concentration = 65 mg/kg

Sodiumthiocyanate

Type of value PNEC
 Type Water
 Conditions Short term
 Species Microorganisms
 Concentration = 0,095 mg/l

Type of value PNEC
 Type Saltwater
 Conditions Short term
 Species Microorganisms
 Concentration = 0,009 mg/l

Type of value PNEC
 Type Sewage treatment plant (STP)
 Conditions Short term
 Species Microorganisms
 Concentration = 30 mg/l

Type of value PNEC
 Type Sediment
 Conditions Short term
 Species Microorganisms
 Concentration = 0,543 mg/kg

Type of value PNEC
 Type Marine sediment
 Conditions Short term
 Species Microorganisms
 Concentration = 0,054 mg/kg

Type of value PNEC
 Type Soil
 Conditions Short term
 Species Microorganisms
 Concentration = 6,336 mg/kg

8.2. Exposure controls

General protective and hygiene measures

Observe the usual precautions for handling chemicals.

Respiratory protection

Not necessary, but do not inhale vapours. If workplace limits are exceeded, a respiratory protection approved for this particular job must be worn.

Hand protection

Gloves
 Appropriate Material neoprene

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Eye protection

Safety glasses

Body protection

Clothing as usual in the chemical industry.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties****Physical state**

liquid

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 = 7,2 to 8,0

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 densityValue > 1,07 g/ml
Temperature 20 °C**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

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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

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

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

Acute oral toxicity (Components)**copper sulphate**

Species	Rats (male/female)		
LD50	=	480	mg/kg
Method	OECD 401		

Sodiumthiocyanate

Species	rat		
LD50	=	764	mg/kg
Method	OECD 401		

Potassium dicyanoaurate (I)

Species	rat		
LD50	=	29	mg/kg

Acute dermal toxicity

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

Acute dermal toxicity (Components)**copper sulphate**

Species	Rats (male/female)		
LD50	>	5000	mg/kg
Method	OECD 402		

Sodiumthiocyanate

Species	guinea pig		
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LD50	>	2000	mg/kg
Method		OECD 402	

Potassium dicyanoaurate (I)

Species		Human	
LD50	=	100	mg/kg

Potassium dicyanoaurate (I)

Species		rat	
LD50	>	2000	mg/kg

Acute inhalational toxicity

ATE	>	20	mg/l
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)**Sodiumthiocyanate**

Species		rat	
LC50	>	1,5	mg/l
Duration of exposure		4	h
Administration/Form		Dust/Mist	

Potassium dicyanoaurate (I)

Species		rat	
LC50	=	0,05	mg/l
Duration of exposure		4	h

Skin corrosion/irritation

Remarks	Based on available data, the classification criteria are not met.
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Serious eye damage/irritation

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

Remarks	Based on available data, the classification criteria are not met.
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Subacute, subchronic, chronic toxicity

Remarks	not determined
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Mutagenicity

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

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

Remarks	Based on available data, the classification criteria are not met.
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Specific Target Organ Toxicity (STOT)**Single exposure**

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

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

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

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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.

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.

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.

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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	-	-	-

SECTION 15: Regulatory information

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

Water Hazard Class (Germany)

Water Hazard Class (Germany) WGK 2

Remarks Derivation of WGK according to Annex 1 No. 5.2 AwSV

VOC

VOC (EU) 0 % 0 g/l

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)
 Aquatic Chronic 3 H412 Calculation method

Hazard statements listed in Chapter 2/3

EUH032	Contact with acids liberates very toxic gas.
H290	May be corrosive to metals.
H300	Fatal if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.

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H330	Fatal if inhaled.
H332	Harmful if inhaled.
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. 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 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.