Safety Data Sheet

according to Regulation (EC) No 1907/2006



Rhodium concentrate JE88-1

Revision date: 26.08.2019 Product code: 8827 Page 1 of 8

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

1.1. Product identifier

Rhodium concentrate JE88-1

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

Use of the substance/mixture

Metal surface treatment products

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: 6265830

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Substance or mixture corrosive to metals: Met. Corr. 1

Skin corrosion/irritation: Skin Corr. 1A

Serious eye damage/eye irritation: Eye Dam. 1

Hazard Statements:

May be corrosive to metals.

Causes severe skin burns and eye damage. Suspected of causing genetic defects.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

sulphuric acid 96 % Rhodium (III) Sulfate

Signal word: Danger

Pictograms:





Hazard statements

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.
H341 Suspected of causing genetic defects.

Precautionary statements

P201 Obtain special instructions before use.

Safety Data Sheet

according to Regulation (EC) No 1907/2006



| Rhodium concentrate JE88-1 | | | |
|----------------------------|--|-------------|--|
| Revision date: 26.08.2019 | Product code: 8827 | Page 2 of 8 | |
| P202 | Do not handle until all safety precautions have been read and understood. | | |
| P234 | Keep only in original packaging. | | |
| P260 | Do not breathe dust/fume/gas/mist/vapours/spray. | | |
| 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. | | |
| P363 | Wash contaminated clothing before reuse. | | |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. | | |
| P310 | Immediately call a POISON CENTER/doctor. | | |
| 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. | | |
| P308+P313 | IF exposed or concerned: Get medical advice/attention. | | |

Absorb spillage to prevent material damage.

SECTION 3: Composition/information on ingredients

Store locked up.

3.2. Mixtures

P390

P405

P406

Hazardous components

| CAS No | Chemical name | | | |
|------------|--------------------------------------|--------------|-----------|--|
| | EC No | Index No | REACH No | |
| | GHS Classification | • | | |
| 7664-93-9 | sulphuric acid 96 % | | max. 15 % | |
| | 231-639-5 | 016-020-00-8 | | |
| | Skin Corr. 1A; H314 | | | |
| 10489-46-0 | Rhodium (III) Sulfate | | 2 % | |
| | 234-014-5 | | | |
| | Met. Corr. 1, Muta. 2, Skin Corr. 1B | | | |

Store in a corrosion-resistant container with a resistant inner liner.

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated, saturated clothing immediately.

In case of accident or if you feel unwell, seek medical advice immediately (show this label if possible).

After contact with skin

Remove mechanically (e.g. dab away using wadding or cellulose material) then thoroughly wash the affected skin with a mild cleansing agent and water. In case of troubles or persistent symptoms, consult an ophthalmologist.

After contact with eyes

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

After ingestion

Rinse mouth immediately and drink plenty of water. Call a physician immediately.

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

Causes severe skin burns and eye damage.

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006



Rhodium concentrate JE88-1

Revision date: 26.08.2019 Product code: 8827 Page 3 of 8

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2). Foam. Water. Extinguishing powder. Water spray. alcohol resistant foam. Dry extinguishing powder.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to the escape of irritating gases and vapours.

5.3. Advice for firefighters

The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep away from unprotected people. Keep upwind.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal.

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

Advice on safe handling

Wear suitable protective clothing and eye/face protection.

Handle and open container with care.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Only use containers specifically approved for the substance/product.

Hints on joint storage

Keep away from food, drink and animal feedingstuffs.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

| CAS No | Substance | ppm | mg/m³ | fibres/ml | Category | Origin |
|-----------|-----------------------|-----|-------|-----------|-----------|--------|
| 7664-93-9 | Sulphuric acid (mist) | - | 0.05 | | TWA (8 h) | WEL |

Additional advice on limit values

Does not contain substances above concentration limits fixing an occupational exposure limit.

8.2. Exposure controls

Safety Data Sheet

according to Regulation (EC) No 1907/2006



Rhodium concentrate JE88-1

Revision date: 26.08.2019 Product code: 8827 Page 4 of 8





Protective and hygiene measures

Do not eat, drink, smoke or sneeze at the workplace. Take off immediately all contaminated clothing.

Eye/face protection

Tightly sealed safety glasses.

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.

Skin protection

Personal protection equipment

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid

Colour: yellow-orange Odour: odourless

pH-Value (at 20 °C):

Changes in the physical state

Initial boiling point and boiling range:

ca. 100 °C

Sublimation point:

not determined

Explosive properties

not explosive.

Decomposition temperature: No data available

Oxidizing properties

Not oxidising.

Density (at 20 °C): 1,09 g/cm³ Water solubility: highly soluble.

Solubility in other solvents

not determined

Vapour density: not determined
Evaporation rate: not determined
Solvent separation test: not applicable

SECTION 10: Stability and reactivity

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No information available.

Safety Data Sheet

according to Regulation (EC) No 1907/2006



Rhodium concentrate JE88-1

Revision date: 26.08.2019 Product code: 8827 Page 5 of 8

10.5. Incompatible materials

Alkalis (alkalis), concentrated. Corrosive to metals

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicocinetics, metabolism and distribution

This mixture does not contain further substances fullfilling the criteria of hazard class "acute toxicity" according to CLP regulation.

Acute toxicity

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

Irritation and corrosivity

Causes severe skin burns and eye damage.

Causes serious eve damage.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of causing genetic defects. (Rhodium (III) Sulfate)

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

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

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

Aspiration hazard

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

SECTION 12: Ecological information

12.1. Toxicity

No data available

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

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

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Can be reused after processing.

Waste disposal number of waste from residues/unused products

110112 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); aqueous rinsing liquids

other than those mentioned in 11 01 11

Safety Data Sheet

according to Regulation (EC) No 1907/2006



Rhodium concentrate JE88-1

Revision date: 26.08.2019 Product code: 8827 Page 6 of 8

Contaminated packaging

Contaminated packages must be completely emptied and can be re-used following proper cleaning.

For cleaning up: Water (with cleaning agent)

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 3264

14.2. UN proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Sulfuric acid,

rhodium-III-sulfate)

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8



Classification code: C1
Special Provisions: 274
Limited quantity: 1 L
Excepted quantity: E2
Transport category: 2
Hazard No: 80
Tunnel restriction code: E

Inland waterways transport (ADN)

14.1. UN number: UN 3264

14.2. UN proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Sulfuric acid,

rhodium-III-sulfate)

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8



Classification code: C1
Special Provisions: 274
Limited quantity: 1 L
Excepted quantity: E2

Marine transport (IMDG)

14.1. UN number: UN 3264

14.2. UN proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Sulfuric acid,

rhodium-III-sulfate)

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8



Special Provisions: 274

Safety Data Sheet

according to Regulation (EC) No 1907/2006



Rhodium concentrate JE88-1

Product code: 8827 Revision date: 26.08.2019 Page 7 of 8

Limited quantity: 1 L Excepted quantity: E2 EmS: F-A. S-B

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 3264

CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Sulfuric acid, 14.2. UN proper shipping name:

rhodium-III-sulfate)

14.3. Transport hazard class(es): Ш 14.4. Packing group: Hazard label: 8



Special Provisions: A3 A803 Limited quantity Passenger: 0.5 L Y840 Passenger LQ: Excepted quantity: F2

IATA-packing instructions - Passenger: 851 IATA-max. quantity - Passenger: 1 L IATA-packing instructions - Cargo: 855 IATA-max. quantity - Cargo: 30 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

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 Not subject to 2012/18/EU (SEVESO III)

(SEVESO III):

National regulatory information

Water contaminating class (D): 1 - slightly 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]

| | <u> </u> |
|--------------------|--------------------------|
| Classification | Classification procedure |
| Met. Corr. 1; H290 | On basis of test data |
| Skin Corr. 1; H314 | On basis of test data |
| Eye Dam. 1; H318 | Calculation method |
| Muta. 2: H341 | Calculation method |

Relevant H and EUH statements (number and full text)

| H290 | iviay be corrosive to metals. |
|------|---|
| H314 | Causes severe skin burns and eve damage |

ige.

Causes serious eye damage. H318 H335 May cause respiratory irritation. H341 Suspected of causing genetic defects.

Safety Data Sheet

according to Regulation (EC) No 1907/2006



Rhodium concentrate JE88-1

Revision date: 26.08.2019 Product code: 8827 Page 8 of 8

Further Information

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