

Rhodium Concentrate JE88

Revision date: 26.09.2018

Product code: 101

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

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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: Abteilung Chemie
Internet: www.jentner.de
Responsible Department: Poison Information Center of the University of Freiburg.

1.4. Emergency telephone number: 0049 (0)761 19240 - 24 h german and english**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. 1

Serious eye damage/eye irritation: Eye Dam. 1

Germ cell mutagenicity: Muta. 2

Hazard Statements:

May be corrosive to metals.

Causes severe skin burns and eye damage.

Causes serious 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) Sulphate

Phosphoric acid 85 %; orthophosphoric acid

Signal word: Danger**Pictograms:****Hazard statements**

H290

May be corrosive to metals.

H314

Causes severe skin burns and eye damage.

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H341 Suspected of causing genetic defects.

Precautionary statements

- P201 Obtain special instructions before use.
- 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.
- P390 Absorb spillage to prevent material damage.
- P405 Store locked up.
- P406 Store in a corrosion-resistant container with a resistant inner liner.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name	Quantity
	EC No	Index No
	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
7664-93-9	Sulphuric acid 96 %	max. 15 %
	231-639-5	016-020-00-8
	Skin Corr. 1A; H314	
10489-46-0	Rhodium (III) Sulphate	4 %
	234-014-5	
	Met. Corr. 1, Muta. 2, Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1; H290 H341 H332 H312 H302 H314 H318	
7664-38-2	Phosphoric acid 85 %; orthophosphoric acid	1-5 %
	231-633-2	015-011-00-6
	Skin Corr. 1B; H314	

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.

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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.

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

Personal protection equipment: see section 8

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.

Advice on storage compatibility

Keep away from food, drink and animal feedingstuffs.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
7664-38-2	Orthophosphoric acid	-	1		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL
7664-93-9	Sulphuric acid (mist)	-	0.05		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

Additional advice on limit values

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

8.2. Exposure controls**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):	<1

Changes in the physical state

Initial boiling point and boiling range:	ca. 100 °C
Sublimation point:	not determined
Flash point:	not applicable

Explosive properties

not explosive.

Decomposition temperature:	No data available
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Oxidizing properties

Not oxidising.

Vapour pressure:	not determined
Density (at 20 °C):	1,09 g/cm ³
Water solubility:	highly soluble.

Solubility in other solvents

not determined

Partition coefficient:	not determined
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Viscosity / dynamic:	not determined
Flow time:	not determined
Vapour density:	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.

10.5. Incompatible materials

Alkalis (alkalis), concentrated.
Corrosive to metals

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute toxicity**

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
10489-46-0	Rhodium (III) Sulphate				
	oral	ATE 500 mg/kg			
	dermal	ATE 1100 mg/kg			
	inhalation vapour	ATE 11 mg/l			
	inhalation aerosol	ATE 1,5 mg/l			

Irritation and corrosivity

Causes severe skin burns and eye damage.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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**

Negative ecological effects are not expected according to current knowledge.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
7664-38-2	Phosphoric acid 85 %; orthophosphoric acid					
	Acute fish toxicity	LC50	138 mg/l	96 h	Gambusia affinis	

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

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. (Rhodium (III) Sulphate, Sulphuric acid))

14.3. Transport hazard class(es):

8

14.4. Packing group:

II

Hazard 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. (Rhodium (III) Sulphate, Sulphuric acid))

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14.3. Transport hazard class(es): 8**14.4. Packing group:** II

Hazard 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. (Rhodium (III) Sulphate, Sulphuric acid)**14.3. Transport hazard class(es):** 8**14.4. Packing group:** II

Hazard label: 8



Special Provisions: 274

Limited quantity: 1 L

Excepted quantity: E2

EmS: F-A, S-B

Air transport (ICAO-TI/IATA-DGR)**14.1. UN number:** UN 3264**14.2. UN proper shipping name:** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Rhodium (III) Sulphate, Sulphuric acid)**14.3. Transport hazard class(es):** 8**14.4. Packing group:** II

Hazard label: 8



Special Provisions: A3 A803

Limited quantity Passenger: 0.5 L

Passenger LQ: Y840

Excepted quantity: E2

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**

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EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3: Phosphoric acid 85 %; orthophosphoric acid

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

Changes

This data sheet contains changes from the previous version in section(s): 2,14.

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

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 May be corrosive to metals.
- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.
- H332 Harmful if inhaled.
- H341 Suspected of causing genetic defects.

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.)