

SAFETY DATA SHEET

Rhodium powder

The safety data sheet is in accordance with Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

Date issued 05.12.2017

Revision date 14.11.2022

1.1. Product identifier

Product name Rhodium powder

REACH Reg. No. 01-2120746412-60-0005

CAS No. 7440-16-6

EC No. 231-125-0

Article no. RdA-0, RdA-1, RdA-2

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

Use of the substance / mixture autocatalysts ; chemical catalysts ; electronics industry ; glass industry

Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Manufacturer

Company name JSC KRASTSVETMET

Office address 1 Transportny Proyezd

Postcode 660027

City Krasnoyarsk

Country Russian Federation

Telephone number +7 (391) 259-33-33 (ext. 4720)

Fax +7 (391) 259-39-42

Email product.safety@nornickel.fi

1.4. Emergency telephone number

Emergency telephone Description: 3E EH&S Mission Control Center: +44 20 35147487 / Access Code: 334656

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Substance / mixture hazardous properties The product is not classified.

2.2. Label elements

Supplemental label information The product is not classified.

2.3. Other hazards

PBT / vPvB Not Classified as PBT/vPvB by current EU criteria.

SECTION 3: Composition / information on ingredients

3.1. Substances

Substance	Identification	Classification	Contents	Notes
Rhodium	CAS No.: 7440-16-6 EC No.: 231-125-0		99,90 - 99,95 %	

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Remove affected person from the immediate area. Ensure supply of fresh air. If breathing is irregular or stopped, administer artificial respiration. Consult a physician.
Skin contact	Wash off with soap and plenty of water. Remove soiled or soaked clothing immediately. Wash contaminated clothing before re-use.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, consult a specialist.
Ingestion	Rinse mouth. Consult a physician.

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

General symptoms and effects Treat symptomatically.

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

Medical treatment No hazards which require special first aid measures.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	The product itself does not burn. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment e.g.: Dry powder; Water spray jet; Foam;
Improper extinguishing media	Not applicable.

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards In the event of fire the following can be released: Metallic oxides;

5.3. Advice for firefighters

Personal protective equipment Wear self-contained breathing apparatus and protective suit.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures Refer to protective measures listed in sections 7 and 8. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.

6.2. Environmental precautions

Environmental precautionary measures Pick up mechanically. Send in suitable containers for recovery or disposal. Should not be released into the environment.

6.3. Methods and material for containment and cleaning up

Other information Pick up mechanically. Send in suitable containers for recovery or disposal.

6.4. Reference to other sections

Other instructions See also section 8,13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling Avoid dust formation.

7.2. Conditions for safe storage, including any incompatibilities

Storage Keep in a dry, cool place.

7.3. Specific end use(s)

Specific use(s) <https://www.epmf.be/rhodium/>

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Substance	Identification	Exposure limits	TWA Year
Rhodium	CAS No.: 7440-16-6	Limit value (8 h) : 0,1 mg/ m ³ Source: HTP Finland Comments: Rh	TWA Year: 2016
Rhodium metal, fume and dust	CAS No.: 7440-16-6	Limit value (8 h) : 0,1 mg/ m ³ Limit value (short term) Value: 0,3 mg/m ³	

8.2. Exposure controls

Precautionary measures to prevent exposure

Product related measures to prevent exposure	Keep away from food, drink and animal feedingstuffs. Keep working clothes separately.
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Hand protection

Suitable gloves type	Wear protective gloves.
Suitable materials	Leather. Butyl rubber. Nitrile.
Breakthrough time	Value: Technical impossibility to obtain the data.

Skin protection

Suitable protective clothing	Wear apron or protective clothing in case of contact.
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Respiratory protection

Recommended type of equipment	In the case of dust or aerosol formation use respirator with an approved filter. Half mask with a particle filter P2 (EN 143).
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Appropriate environmental exposure control

Environmental exposure controls	The employer shall fulfill requirements of IPPC Directive.
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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Powder
Colour	Silver. Grey.
Odour	No characteristic odour.
Odour limit	Comments: Not relevant.
pH	Status: In delivery state Comments: insoluble
Melting point / melting range	Comments: 1960-2000°C
Boiling point / boiling range	Comments: Not applicable to solids that melt >300°C.
Flash point	Comments: Not applicable. inorganic substance
Flammability	The product is not flammable.
Vapour pressure	Comments: Not applicable to solids that melt >300°C.
Vapour density	Comments: Not applicable. inorganic substance
Bulk density	Value: 3 - 4 g/cm ³
Partition coefficient: n-octanol/ water	Comments: Not applicable. inorganic substance
Auto-ignition temperature	Comments: The product is not flammable.
Viscosity	Comments: Solid

Explosive properties	Not explosive
Oxidising properties	no oxidizing

9.2. Other information

Physical hazards

Particle size	Comments: Granulometry from manufacturer.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	No dangerous reaction known under conditions of normal use.
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10.2. Chemical stability

Stability	Stable under recommended storage conditions.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Reacts with sulphuric acid, hydrogen bromide and molten cyanides.
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10.4. Conditions to avoid

Conditions to avoid	Avoid dust formation.
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10.5. Incompatible materials

Materials to avoid	Acids; Bases; Oxidizing agents;
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10.6. Hazardous decomposition products

Hazardous decomposition products	Metallic oxides;
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SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Other information regarding health hazards

Assessment of acute toxicity, classification	If swallowed : LD50/oral/rat = >2000 mg/kg In case of skin contact : No studies have been found. If inhaled : No studies have been found.
Assessment of skin corrosion / irritation, classification	According to the classification criteria the product is not considered as being an eye irritant. According to the classification criteria the product is not considered as being a skin irritant.
General respiratory or skin sensitisation	Not classified as skin and respiratory sensitizer.
Assessment of carcinogenicity, classification	Not classified as dangerous.

Aspiration hazard, comments Not applicable.

11.2 Other information

Endocrine disruption No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Not classified. No data available.

12.2. Persistence and degradability

Persistence and degradability description/evaluation Not applicable.

12.3. Bioaccumulative potential

Bioaccumulation, evaluation Not applicable.

12.4. Mobility in soil

Mobility No data available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment Not Classified as PBT/vPvB by current EU criteria.

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects

Additional ecological information No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate methods of disposal for the chemical Recover and reclaim or recycle, if practical.

Appropriate methods of disposal for the contaminated packaging Packaging that cannot be cleaned should be disposed as special waste in compliance with local and national regulations.

SECTION 14: Transport information

14.1. UN number

Comments Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name

Comments Not classified as dangerous in the meaning of transport regulations.

14.3. Transport hazard class(es)

Comments Not classified as dangerous in the meaning of transport regulations.

14.4. Packing group

Comments Not classified as dangerous in the meaning of transport regulations.

14.5. Environmental hazards

Comments Not classified as dangerous in the meaning of transport regulations.

14.6. Special precautions for user

Special safety precautions for user None.

14.7. Maritime transport in bulk according to IMO instruments

Transport in bulk (yes/no) No

SECTION 15: Regulatory information

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

Legislation and regulations None.

15.2. Chemical safety assessment

Chemical safety assessment performed Yes

SECTION 16: Other information

Additional information Disclaimer
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Information added, deleted or revised Relevant changes compared to the previous version of the safety data sheet are indicated with verticle lines in the left margin.

Version 4

Exposure scenario  [Rhodium ES 2017.pdf](#)