

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 22.06.2017

1.1. Product identifier

Product name Rhodium powder
REACH Reg. No., Comments Not yet available.
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/preparation 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
Tel +7 (391) 259-33-33 (ext. 4720)
Fax +7 (391) 259-39-42
E-mail 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 substance or mixture

Substance / mixture hazardous properties The product is not classified.

2.2. Label elements

2.3. Other hazards

PBT / vPvB

The PBT and vPvB criteria of Annex XIII to the regulation does not apply to inorganic substances.

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance	Identification	Classification	Contents
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.
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4.3. Indication of any immediate medical attention and special treatment needed

Medical treatment	No hazards which require special first aid measures.
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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; Carbon dioxide (CO ₂); 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;
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5.3. Advice for firefighters

Personal protective equipment	Wear self-contained breathing apparatus and protective suit.
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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.
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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) No data available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Substance	Identification	Value	TWA Year
Rhodium	CAS no.: 7440-16-6	TWA (8h): 0,1 mg/m ³ Exposure Limit Letter Letter description: Rh Source: HTP Finland	TWA Year: 2016
Other Information about threshold limit values	TWA value 0.1 mg/m ³ Fume and inhale dust STEL value 0.3 mg/m ³ Fume and inhale dust		

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.

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.

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).

Appropriate environmental exposure control

Environmental exposure controls

The employer shall fulfill requirements of IPPC Directive.

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 (solid, gas)	The product is not flammable.
Lower explosion limit with unit of measurement	Comments: Not explosive
Upper explosion limit with units of measurement	Comments: Not explosive
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
Spontaneous combustibility	Comments: The product is not flammable.
Viscosity	Comments: Not applicable. Solid
Explosive properties	Not explosive
Oxidising properties	no oxidizing

9.2. Other information

Other physical and chemical properties

Physical and chemical properties	No data available.
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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 toxicological effects

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 carcinogenicity classification	Not classified as dangerous.
Aspiration hazard, comments	Not applicable.

Symptoms of Exposure

Other Information	No studies have been found.
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SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity	Not classified. No data available.
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12.2. Persistence and degradability

Persistence degradability additional info	Not applicable.
Persistence and degradability	Not applicable.

12.3. Bioaccumulative potential

Bioaccumulative potential	Bioaccumulation is unlikely.
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12.4. Mobility in soil

Mobility	No data available.
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12.5. Results of PBT and vPvB assessment

PBT assessment results	The PBT and vPvB criteria of Annex XIII to the regulation does not apply to inorganic substances.
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12.6. Other adverse effects

Other adverse effects / Remarks	no data available
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Specify the appropriate methods of disposal	Contaminated packaging should be emptied as far as possible. Packaging that cannot be cleaned should be disposed as special waste in compliance with local and national regulations.
Other Information	Contact manufacturer. Dispose of 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.
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14.2. UN proper shipping name

ADR / RID / ADN	Not classified as dangerous in the meaning of transport regulations.
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14.3. Transport hazard class(es)

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

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

Comments	Not classified as dangerous in the meaning of transport regulations.
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14.6. Special precautions for user

Special safety precautions for user	Not classified as dangerous in the meaning of transport regulations.
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14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Pollution category	Not classified as dangerous in the meaning of transport regulations.
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SECTION 15: Regulatory information

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

Legislation and regulations	None.
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15.2. Chemical safety assessment

Chemical Safety Assessment	None.
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SECTION 16: Other information

Additional information

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