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SAFETY DATA SHEET Iridium 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 Iridium powder
REACH Reg. No., Comments Not yet available.
CAS no. 7439-88-5
EC no. 231-095-9
Article no. IA-0, IA-1, IA-2

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

Use of the Production of alloys Intermediate.

substance/preparation

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 <u>product.safety@nornickel.fi</u>

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 The product is not classified. hazardous properties

2.2. Label elements

Supplemental label information The product is not classified.

2.3. Other hazards

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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

SubstanceIdentificationClassificationContentsIridiumCAS no.: 7439-88-5Additional information on99,90 – 99,98 %

EC no.: 231-095-9 classification: See chapter 2.1

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; Carbon dioxide (CO2);

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

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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. (Section 13)

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)

Recommendations http://epmf.be/index.php/reach-consortiumleft/platinum-group-metals-pgm

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL / PNEC

DNEL Comment : No data available.

PNEC Comment : No data available.

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.

Eye / face protection

Suitable Eye Protection

Use eye protection. Wear full-face visor or shield.

Hand protection

Suitable gloves type Wear protective gloves.

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

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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 Grey.

Odour No characteristic odour.
Odour limit Comments: Not relevant.
pH Status: In delivery state

Status: In delivery state Comments: Not relevant.

Melting point / melting range Comments: 2410-2447°C

Boiling point / boiling range Comments: Not applicable to solids that melt >300°C.

Flash point Comments: Not relevant.

Flammability (solid, gas) The product is not flammable.

Lower explosion limit with unit

of measurement

Upper explosion limit with units

of measurement

Comments: Not explosive

Comments: Not explosive

Vapour pressure Comments: Not applicable to solids that melt >300°C.

Vapour density Comments: Not applicable. inorganic substance

Specific gravity Comments: 22.65

Partition coefficient: n-

octanol/water

Comments: Not applicable. inorganic

Spontaneous combustability 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

No data available.

properties

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Stability Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

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10.4. Conditions to avoid

Conditions to avoid Avoid dust formation.

10.5. Incompatible materials

Materials to avoid Strong acids; Oxidizing agents;

10.6. Hazardous decomposition products

Hazardous decomposition

Metallic oxides:

products

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Substance Iridium

Acute toxicity Type of toxicity: Acute

Value:

Other information regarding health hazards

Assessment of acute toxicity

classification

Not Rated

Assessment of skin corrosion / 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.

irritation, classification

Not Rated

General respiratory or skin

sensitisation

Assessment carcinogenicity

classification

Not Rated

Aspiration hazard, comments

Not applicable.

Symptoms of Exposure

Other Information No studies have been found.

SECTION 12: Ecological information

12.1. Toxicity

Not classified. No data available. **Ecotoxicity**

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.

12.4. Mobility in soil

Mobility

No data available.

12.5. Results of PBT and vPvB assessment

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PBT assessment results

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

substances.

12.6. Other adverse effects

Other adverse effects /

no data available

Remarks

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Specify the appropriate methods of disposal

If recycling is not practicable, dispose of in compliance with local regulations.

Other Information Contact manufacturer.

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

ADR / RID / ADN 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

Not classified as dangerous in the meaning of transport regulations.

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.

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

No

performed

SECTION 16: Other information

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Additional information

Disclaimer

The information in this document is believed to be correct as of the date issued. However, no warranty of merchantability, fitness for any particular purpose, or any other warranty is expressed or is to be implied regarding the accuracy or completeness of this information, the results to be obtained from the use of this information or the product, the safety of this product, or the hazards related to its use. This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assume the risk of his use thereof.

Key literature references and sources for data

Information which has been added, deleted or revised

Finnish Environment Institute: Environmental Properties of Chemicals Lewis, R. J.: Saxs Dangerous Properties of Industrial Materials

Additions, Deletions, Revisions