

Palladium powder

Safety Data Sheet

According to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 10/20/2025 Revision date: 10/20/2025 Version: 1.0

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

1.1. Product identifier

Product form : Substance
Trade name : Palladium powder
CAS-No. : 7440-05-3
EC-No. : 231-115-6
Article No. : PdAP-0, PdAP-1, PdAP-2
Nanoform/Contain nanoform substance : No

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

Relevant identified uses

Use of the substance/mixture : Jewellery industry, stomatology, medicine, investment.

Uses advised against

Restrictions on use : No information available.

1.3. Details of the supplier of the safety data sheet

Manufacturer:

Joint Stock Company Prioksky Plant of Non-ferrous Metals
Russian Federation, Ryazan region, Kasimov, md.Prioksky
391303
T +7(49131)3-20-00 - F +7(49131)3-20-00
product.safety@nornickel.fi

1.4. Emergency telephone number

Emergency number : +44-20-35147487

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) : None
Signal word (CLP) : None
Hazard statements (CLP) : Not applicable.
Precautionary statements (CLP) : Not applicable.
EUH-statements : None.

2.3. Other hazards

Other hazards which do not result in classification : No information available.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or

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Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.1. Substances

Name : Palladium
CAS-No. : 7440-05-3
EC-No. : 231-115-6

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Palladium	CAS-No.: 7440-05-3 EC-No.: 231-115-6	99.90 - 99.98	Not classified

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact : Wash skin with plenty of water. Take off all contaminated clothing and wash it before reuse.
First-aid measures after eye contact : Rinse eyes with water as a precaution. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Rinse mouth. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects : No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Dry powder, water spray, foam.
Unsuitable extinguishing media : No information available.

5.2. Special hazards arising from the substance or mixture

Fire hazard : No fire hazard.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released, such as: metal oxides.

5.3. Advice for firefighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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General measures : Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel.

6.2. Environmental precautions

Avoid release to the environment. Do not allow to enter sewers, surface or groundwater.

6.3. Methods and material for containment and cleaning up

For containment : Using a clean shovel, put the material in a dry container and cover without compressing it.
Methods for cleaning up : Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Evacuate unnecessary personnel. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ensure adequate ventilation, especially in confined areas. Wear personal protective equipment.
Hygiene measures : Keep away from food, drink and animal feeding stuffs. Avoid contact with skin and eyes. Avoid dust formation. Avoid breathing dust. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep in a cool, well-ventilated place away from heat.
Storage conditions : Protect from sunlight. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Incompatible materials : Strong acids, oxidizing agents.
Storage temperature : No information available.
Packaging materials : Store always product in container of same material as original container.

Switzerland

Storage class (LK) : NG - Non-hazardous

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

Palladium (7440-05-3)	
Finland - Occupational Exposure Limits	
HTP (OEL TWA)	0.5 mg/m ³

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8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protection equipment

Eye and face protection

Eye protection:

Safety glasses.

Skin protection

Skin and body protection:

Wear suitable protective clothing.

Hand protection:

Protective gloves.

Suitable materials: leather, butyl rubber, nitrile.

Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment (particle filter P2 (EN 143)).

Thermal hazards

Thermal hazard protection:

No information available.

Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Powder (Sponge)
Colour	: Grey
Odour	: Odourless
Odour threshold	: Not available
Relative evaporation rate (butylacetate=1)	: Not available
Melting point	: 1552 - 1554 °C
Freezing point	: Not available
Boiling point	: Not applicable to solids that melt > 300 °C
Flammability	: Non flammable
Explosive properties	: Not explosive
Oxidising properties	: Non oxidizing
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: Not applicable to inorganic substance
Auto-ignition temperature	: The product is not flammable
Decomposition temperature	: Not available
pH	: Not available
pH solution	: Not available
Viscosity, kinematic	: Not applicable to solids that melt > 300 °C
Viscosity, dynamic	: Not applicable to solids that melt > 300 °C
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not applicable to inorganic
Vapour pressure	: Not applicable to solids that melt > 300 °C
Vapour pressure at 50 °C	: Not applicable to solids that melt > 300 °C
Density	: 3 - 4 g/cm ³ (Bulk density)
Relative density	: Not available

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Relative vapour density at 20 °C : Not applicable to inorganic substance
Particle size : Not available

9.2. Other information

Information with regard to physical hazard classes

No additional information available

Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Dust formation. Incompatible materials.

10.5. Incompatible materials

Strong acids, oxidizing agents.

10.6. Hazardous decomposition products

Metal oxides.

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

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LD50 oral rat	>= 2000 mg/kg
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Skin corrosion/irritation : Not classified
According to the classification criteria the product is not considered as being a skin irritant.

Serious eye damage/irritation : Not classified
According to the classification criteria the product is not considered as being an eye irritant.

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

11.2. Information on other hazards

Endocrine disrupting properties

Adverse health effects caused by endocrine : The substance is not included in the list established in accordance with Article 59(1) of

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disrupting properties

REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

Other information

Potential adverse human health effects and symptoms

: No additional information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general

: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute)

: Not classified

Hazardous to the aquatic environment, long-term (chronic)

: Not classified

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

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This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties

: The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations

: Comply with applicable regulations for solid waste disposal. Disposal must be done according to official regulations.

Additional information

: Do not re-use empty containers.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

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ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (2024/590)

Not listed on the Ozone Depletion list (Regulation EU 2024/590)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

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Explosives Precursors Regulation (EU 2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (EC 273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:	
ACGIH	American Conference of Government Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	Chemical oxygen demand (COD)
CSA	Chemical safety assessment
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
ED	Endocrine disruptor
EN	European Standard
EWC	European waste catalogue
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
Log Kow	Partition coefficient n-octanol/water (Log Kow)
Log Pow	Partition coefficient n-octanol/water (Log Pow)
MAK	maximum workplace concentration
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration

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Abbreviations and acronyms:	
N.O.S.	Not Otherwise Specified
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
OSHA	Occupational Safety & Health Administration
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
PPE	Personal protection equipment
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
TF	Technical function
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
TWA	Time Weighted Average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative
UFI	Unique Formula Identifier

Data sources	: ECHA. Loli.
Training advice	: Normal use of this product shall imply use in accordance with the instructions on the packaging.
Other information	: No information available.

Full text of H- and EUH-statements:
No information available.

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.