

1. Identification of the substance / mixture and of the company / undertaking

1.1 Product identifier

Product name: Palladium foil
CAS-No.: 7440-05-3
EC-No.: 231-115-6

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

Identified use: Laboratory chemical

1.3 Details of the supplier of the safety data sheet

Company: NETZSCH-Gerätebau GmbH
Wittelsbacherstraße 42
95100 Selb / Germany

Customer service Phone: +49 9287 881-555

1.4 Emergency Phone: +49 9287 881-174 (during office hours)

Fax: +49 9287 881-505

E-mail: service@ngb.netzsch.com

2. Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

none

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

none

Hazard pictograms: none

Signal word: none

Hazard statements: none

Precautionary statements: none

Additional information: -

2.3 Other hazards

No information available.

Results of PBT- und vPvB assessment

PBT: No data available.

vPvB: No data available.

3. Composition / information on ingredients

3.1 Chemical characterization:

Substances

CAS-No. Description: 7440-05-3 Palladium

Identification number(s):

EC number: 231-115-6

Formula: Pd

Molar mass [g/mol]: 106.42

4. First aid measures

4.1 Description of first aid measures

General information: -

After inhalation: Remove from exposure, lie down. Move to fresh air. Obtain medical attention.

After skin contact: Wash off with soap and water while removing all contaminated clothes and shoes. In the case of skin irritation or allergic reactions see a physician.

After eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

After swallowing: Clean mouth with water. Get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-Fighting measures

5.1 Extinguishing agents

Suitable extinguishing agents: Water spray. Carbon dioxide (CO₂). Dry chemical.

For safety reasons unsuitable extinguishing agents: No information available.

5.2 Special hazards arising from the substance or mixture

Explosive properties.

In case of fire, the following can be released:

Sulfur oxides.

5.3 Advice for firefighters

Protective equipment: Self-contained breathing apparatus and full protective gear.

Additional information: -

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

6.2 Environmental precautions

See section 12 for additional ecological information.

6.3 Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal.

6.4 Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

7. Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breathe dust.

Information about fire and explosion protection:

none

7.2 Conditions for safe storage, including any incompatibilities

Requirements to be safe storage,

including any incompatibilities: Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

Information about storage in one common storage facility: none

Further information about storage conditions: none

Recommended storage temperature: none

7.3 Specific end use(s)

Use in laboratories.

8. Exposure controls / personal protection

Additional information about design of technical facilities: None under normal use conditions.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace: Exposure limits

Component	Finland
Palladium	TWA: 0.5 mg/m ³ 8 tunteina

Additional information: none

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Handle in accordance with good industrial hygiene and safety practice.
Keep away from food, drink and animal feeding stuffs.
Do not eat, drink or smoke when using this product.
Remove and wash contaminated clothing before re-use.
Wash hands before breaks and at the end of workday.

Individual protection measures:

No information available.

Respiratory protection:

No information available.

Protection of hands:

Protective gloves

Eye protection:

Safety glasses with side-shields (European standard- EN 166)

Body protection:

Protective gloves and clothing

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

<u>Appearance</u> Form: Colour:	Powder Solid Brown
Odour:	Odourless
Odour threshold:	No data available.
pH-value:	No information available.
<u>Change in condition</u> Melting point / Melting range: Boiling point / Boiling range:	No data available. No information available.
Flash point:	No information available.
Flammability (solid, gaseous):	No information available.
Ignition temperature:	Not applicable
Decomposition temperature:	> 999 °C
Self-igniting:	Not applicable
Danger of explosion:	Not applicable
<u>Explosion limits</u> Lower: Upper:	No data available. No data available.
Oxidizing properties:	No information available.
Vapour pressure:	No data available.
Density at 20°C:	No data available.
Relative density:	No data available.
Vapour density:	Not applicable.
Evaporation rate:	Not applicable.
Solubility in / Miscibility with water:	Insoluble
Partition coefficient (n-octanol / water):	No data available.
<u>Viscosity</u> Dynamic: Kinematic:	Not applicable. Not applicable.

9.2 Other information

None

10. Stability and reactivity

10.1 Reactivity

None known, based on information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Incompatible products.

10.5 Incompatible materials

Alcohols.

10.6 Hazardous decomposition products

Sulfur oxides.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD / LC50 values relevant
for classification: No data available.

Potential health effects

Skin: No data available.

Eyes: No data available.

Inhalation: No data available.

Ingestion: No data available.

Sensitization: No data available.

CMR effects

Germ cell mutagenicity: No data available.

Carcinogenicity: No data available.

Reproductive toxicity: No data available.

Aspiration hazard:

Not applicable.

Specific target organ toxicity – single exposure:

No data available.

Specific target organ toxicity – repeated exposure:

No data available.

Additional toxicological information:

No data available.

Further information:

The toxicological properties have not been fully investigated.

12. Ecological information

12.1 Toxicity

Ecotoxicity effects

12.2 Persistence and degradability

Persistence: Insoluble in water.

Degradability: Not relevant for inorganic substances.

12.3 Bioaccumulative potential

May have some potential to bioaccumulate.

12.4 Mobility in soil

Is not likely mobile in the environment due its low water solubility.

Ecotoxical effects

Remark: No data available.

12.5 Results of PBT and vPvB assessment

PBT: No data available.

vPvB: No data available.

12.6 Other adverse effects

This product does not contain any known or suspected endocrine disrupters.

13. Disposal considerations

13.1 Waste treatment methods

Recommendation: No hazardous waste. Consult local, regional and national waste regulations to ensure complete and accurate classification.

Uncleaned packaging

Recommendation: Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use empty containers.

14. Transport information

	ADR	IMDG	IATA
14.1 UN-Number	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name			
14.3 Transport hazard class(es) / -label			
14.4 Packing group:			
Transport hazard class(es):			
Label:			
danger symbol:			
14.5 Environmental hazards:	No hazards identified.	No hazards identified.	No hazards identified.

14.6 Special precautions for user

No special precautions required.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable. Packaged goods.

15. Regulatory information

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

National regulations:

Information about limitation of use: No data available.

Waterhazard class: nwg - nicht wassergefährdend (non-hazardous to waters).

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been conducted.

16. Other Information

Guarantee

This information has been compiled to the best of our knowledge; however, we make no claim as to its completeness and it is meant to serve only as a guideline. NETZSCH-Gerätebau GmbH disclaims any liability for damages which may occur in handling or in contact with these chemicals.

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