

**Safety data sheet**  
**According to Regulation n. 1907/2006 and Regulation 830/2015**  
**Pure Palladium in powder form 99.95%**



Revision n. IV dd 01.21.2019  
Replace revision n III dd 06.01.2015

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY UNDERTAKING**

**1.1 Product Identifier**

Chemical name Palladium  
C.A.S. Registry Number 7440-05-3  
EINECS number 231-115-6  
Molecular weight 106,4 g/mol  
Chemical Formula Pd

**1.2 Pertinent use of the substance and recommended use**

Industrial sector : goldsmith/silversmith- galvanic- catalyzers  
Type of employment : industrial  
Application : professional

**1.3 Informations about the furniture of the safety data sheet**

Name FAGGI ENRICO S.P.A.  
Address Via Majorana, 101/103 50019 Sesto Fiorentino FI  
Telephone number 055311861  
Fax number 055311791  
Competent person responsible for the safety data sheet lorenzo.magaldi@faggi.it  
Emergency telephone number Tel. 0557947819 Centro Antiveleni di Firenze

**1.5 Registration number**

For this product is not necessary a registration number

**2. HAZARDS IDENTIFICATION**

**2.1 Classification of the mixture in accordance with Regulation (CE) n. 1272/2008:**

**Not dangerous**

**2.2 Label elements: not applicable**

- **Further Informations** In combination with ammonia nitrate of silver can form unstable compounds such as silver fulminate
- Results of PBT** PBT : not applicable
- e vPvB** vPvB : not applicable

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Substance: palladium**

CAS number 7440-05-3  
EINECS number 231-115-6

**4. FIRST-AID MEASURES**

**4.1 Description of the first-aid measures**

Inhalation Not applicable  
Ingestion Not applicable  
Skin contact Not applicable  
Eye contact Not applicable

**Recommendations:**

- **Need for immediate medical attention** NO

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- **Possibility of delayed effects subsequent the exposition** NO
- **Move the exposed individual from the area to fresh air** NO
- **Remove clothes and shoes from the individual** NO
- **Modality of manipulation of contaminated garments** NONE
- **For lenders of first aid, wear the DPI** NONE

**4.2 Main symptoms and effects both acute and delayed**

None

**4.3 Indication of the possible urgency to consult immediately a doctor or of special treatments**

None

**5. FIREFIGHTING MEASURES**

**5.1 Extinguishing media**

Suitable extinguishing media CO<sub>2</sub>, powder or water spray

Unsuitable extinguishing media Do not use water on molten metal to the danger of violent steam development

**5.2 Special hazards arising from the substance or the mixture**

In the form of powder may be pyrophoric

**5.3 Advice for firefighters**

Normal garments for firefighting, as an air breathing apparatus (ref. standard EN 137) or fresh air hose breathing, protective clothing for welding (EN 469), flame resistant gloves (EN659) and fireman's boots (HOA29 or A30)

**6. ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures**

**6.1.1. For non-emergency personnel**

None

**6.1.2. For emergency responders**

Collect material avoiding dust formation

**6.2 Environmental precautions**

None

**6.3 Methods and materials for containment and clean-up**

**6.3.1. Recommendations about the methods of containment of a spill**

None

**6.3.2. Recommendations about the methods of reclamation of a spill**

None

**6.3.3. Any other informations**

None

**6.4 Reference to other sections**

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**7. HANDLING AND STORAGE**

**7.1. Precautions for safe handling**

**7.1.1. Recommendations that allow safe handling of the substance or mixture, such as containment and measures to prevent fine as well as aerosol and dust generation**

Avoid generation of dusts

**7.1.2. Advice on general occupational hygiene**

Do not eat, drink or smoke in designated work areas. Wash hands after

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handling. To remove contaminated clothing and protective equipment before entering eating areas

- 7.2. Conditions for safe storage, including any incompatibilities**
- 7.2.1. Risk management decisions arising from explosive atmospheres, corrosive conditions, flammability hazards, incompatible materials, evaporative conditions, potential ignition sources**  
 Avoid generation of dusts
- 7.2.3. Containment of the effects of weather conditions, pressure, temperature, sunlight, humidity and vibrations**  
 None
- 7.2.4. Conditions to maintain the integrity of the substance or mixture**  
 None
- 7.2.5. Decisions about ventilation requirements, specific design for storage rooms or vessels, quantitative limits in storage conditions, compatibility of the packaging.**  
 None
- 7.3. Specific end use**  
 None
- 8. EXPOSURE CONTROL/ INDIVIDUAL PROTECTION**
- 8.1. Controller parameters**  
 None
- 8.2. Exposure controls**
- 8.2.1. Appropriate engineering controls**  
 None
- 8.2.2. Individual measures, such as personal protective equipment**
- |                                |  |
|--------------------------------|--|
| <b>Eye/face protection</b>     | Not necessary  |
| <b>Skin protection (hands)</b> | Not necessary  |
| <b>Skin protection (body)</b>  | Not necessary  |
| <b>Respiratory protection</b>  | Use a dust-protection mask with P3 filters if during the use are generated dusts |
| <b>Thermal hazards</b>         | None   |
- 8.2.3. Environmental exposure controls**  
 None
- 9. PROPERTIES (PHYSICAL/CHEMICAL)**
- 9.1 Informations about the main physical and chemical properties**
- |  |                |
|--|----------------|
| Aspect                                       | Grey powder    |
| Odour  | Odourless      |
| Odour threshold                              | Not applicable |
| pH   | Not applicable |
| Melting point/freezing point                 | 1554,9 °C      |
| Initial boiling point and boiling range      | 2963 °C        |
| Flashpoint                                   | Not flammable  |
| Evaporation rate                             | Not applicable |
| Flammability solids/gases                    | Not flammable  |
| Upper/lower flammability or explosive limits | Not applicable |
| Vapour pressure                              | Not determined |

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Vapour density	Not determined
Relative density	12,2 g/cm <sup>3</sup>
Solubility/Solubilities	Insoluble
The log octanol/water partition Coefficient	Study not scientifically justified
Auto-ignition temperature	Study not scientifically justified
Decomposition temperature	Not applicable Study not scientifically justified
Viscosity	Study not scientifically justified
Explosive properties	Not explosive
Oxidising properties	Not oxidising

**9.2. Other informations (miscibility, solubility, fat solubility, conductivity, redox potential, radical formation potential and photocatalytic properties)**

None

**10. STABILITY AND REACTIVITY**

**10.1 Reactivity**

No information was available

**10.2 Chemical stability**

The substance

**10.3 Possibility of hazardous reactions**

Palladium is a catalytic substance and may cause reaction in contact with a large number of organic and inorganic substances with danger of fire and explosion.

**10.4 Conditions to avoid**

Formation of dusts

**10.5 Incompatible materials**

Selenium and selenium fluorides

**10.6 Hazardous decomposition products**

None

**11. TOXICOLOGICAL INFORMATION**

**11.1 Informations about toxicological effects**

Acute toxicity	Not toxic
<b>Skin corrosion/irritation</b>	Non-corrosive
<b>Eye damage/irritation</b>	Not irritating
<b>Skin sensitisation or corrosion/irritation</b>	Not sensitizing
<b>Germ cell mutagenicity</b>	Not mutagenic
<b>Carcinogenity</b>	Not carcinogenic
<b>Reproductive toxicity</b>	Not toxic for reproduction
<b>Specific target organ toxicity (STOT)-single exposure</b>	
<b>Specific target organ toxicity (STOT)-repeated exposure</b>	Not applicable

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	<b>Aspiration hazard</b>	Inhalation of dust may cause irritation of the mucous membranes
<b>11.2</b>	<b>Specific target organ toxicity</b> None	
<b>11.3</b>	<b>Symptoms related to the physical, chemical and toxicological characteristic</b> None	
<b>11.4.</b>	<b>Delayed, immediate and chronic effects from short and long term exposure</b> None	
<b>11.5.</b>	<b>Interactive effects</b> None	
<b>11.6.</b>	<b>In the absence of specific data</b> None	
<b>11.7.</b>	<b>Other informations</b> None	
<b>12.</b>	<b>ECOLOGICAL INFORMATIONS</b>	
	<b>Aquatic Toxicity</b>	Not toxic for aquatic organisms
	<b>Persistence and degradability</b>	Not applicable
	<b>Bioaccumulation potential</b>	Not applicable
	<b>Mobility in soil</b>	Not applicable
	<b>Results of PBT e vPvB</b>	Not applicable
	<b>Other adverse effects</b>	Not applicable
<b>13.</b>	<b>DISPOSAL CONSIDERATIONS</b>	
<b>13.1.</b>	<b>Waste treatment methods</b> The product can be recycled	
<b>14.</b>	<b>TRANSPORT INFORMATIONS</b>	
	ONU number	Not applicable
	Name	Not applicable
	Transport hazard class	Not applicable
	Packing group	Not applicable
	Environmental hazards	Not applicable
	Special precautions for users	Not applicable
<b>15.</b>	<b>REGULATORY INFORMATION</b>	
	<b>15.1</b>	
	<b>Legislation</b>	<b>Applicability</b>
	<i>Reg. (CE) 1907/2006/CE Reach</i>	YES
	<i>Reg. (CE) 1272/2008 CLP and subsequent amendments and addenda</i>	YES
	<i>Reg. (CE) 2037/2000 "Substances that deplete the ozone layer"</i>	NO
	<i>Reg. (CE) 850/2004 "The persistent organic pollutants"</i>	NO
	<i>Reg. (CE) 689/2008 "The export and import of dangerous chemicals"</i>	NO
	<i>Substance listed in Annex I 2012/18/UE cd Seveso</i>	NO
	<i>D.lgs 81/2008 Uniform Occupational Health and Safety Code</i>	NO
	<i>DirettivE 2014/103/UE "Adr"</i>	NO

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- 16.**
- 15.2 Chemical Safety Assessment**  
A chemical safety assessment has not been carried out
  - OTHER INFORMATIONS**
  - 16.1 Changes as compared to the previous version**  
Modified section 1
  - 16.2 Legend to abbreviations and acronyms**  
ADR: European Agreement on the international carriage of goods by road  
GHS: Globally Harmonised System of Classification and Labelling  
EINECS: European Inventory of Existing Commercial Chemical Substances  
CAS: Chemical Abstract Service
  - 16.3 Bibliographical references and data sources**  
ECHA substance data bank:  
<http://echa.europa.eu/web/guest/information-on-chemicals/registered-substances>  
  
Platform ESIS  
  
<http://esis.jrc.ec.europa.eu>
  - 16.5. Advice on any training appropriate for workers to ensure protection of human health and the environment**
    - Training sessions on DPI
  - 16.6. Other informations**  
Not available