

1 Identification of the substance/preparation and of the company/undertaking**· Product details****· Trade name:** Palladium**· Article number:** 87870060**· Application of the substance / the preparation**

Catalyst

Intermediate

Precious metal alloy for technical purposes

· Manufacturer/Supplier:

W.C. Heraeus GmbH

Chemicals Division - Chemical Products

Heraeusstr. 12-14, D-63450 Hanau

Deutschland/ Germany

· Further information obtainable from: Dr. Marcus Hannakam Tel: +49-(0)6181-353240**· Information in case of emergency:**

factory security offices: +49 - (0)6181 - 35213

christian.mock@heraeus.com

2 Hazards identification**· Hazard description:** Not applicable.**· Information concerning particular hazards for human and environment:** Not applicable.**3 Composition/information on ingredients****· Chemical characterization:****· CAS No. Description**

7440-05-3 palladium

· Identification number(s)**· EINECS Number:** 231-115-6**4 First aid measures****· General information:** In case of accident or if you feel unwell, seek medical advice immediately.**· After inhalation:** Supply fresh air; consult doctor in case of complaints.**· After skin contact:** Rinse with warm water.**· After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.**· After swallowing:** Rinse out mouth and then drink plenty of water.**5 Fire-fighting measures****· Suitable extinguishing agents:**

Use fire extinguishing methods suitable to surrounding conditions.

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.**· For safety reasons unsuitable extinguishing agents:** Water with full jet**· Special hazards caused by the substance, its products of combustion or resulting gases:**

The product is not combustible.

Fine sized metal shows catalytic effects and can accelerate combustion processes. Keep away from combustible material.

· Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

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6 Accidental release measures

- **Person-related safety precautions:**
The usual precautionary measures are to be adhered to when handling chemicals.
Avoid formation of dust.
- **Measures for environmental protection:** No special measures required.
- **Measures for cleaning/collecting:** Send for recovery or disposal in suitable receptacles.

7 Handling and storage

- **Handling:**
- **Information for safe handling:** Prevent formation of dust.
- **Information about fire - and explosion protection:**
The product is not combustible.
see chapter 5
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists valid during the making were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **Respiratory protection:** If dust or spray is present use respiratory protection filter P3.
- **Protection of hands:** No chemical-protective gloves required.
- **Eye protection:** Goggles recommended during refilling
- **Body protection:** Light weight protective clothing

9 Physical and chemical properties· **General Information**

Form:	Solid
Colour:	Grey
Odour:	Odourless

· **Change in condition**

Melting point/Melting range:	1552°C
Boiling point/Boiling range:	2930°C

· **Flash point:** Not applicable.· **Flammability (solid, gaseous):** Product is not flammable.· **Danger of explosion:** Product does not present an explosion hazard.· **Vapour pressure at 1400°C:** 0.0013 hPa· **Density at 20°C:** 12.02 g/cm³· **Solubility in / Miscibility with water:** Insoluble.

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10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values relevant for classification:**

Oral	LD50	>9000 mg/kg (rat)
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- **Primary irritant effect:**

- **on the skin:** No irritant effect.

- **on the eye:** No irritating effect.

- **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

The substance is not subject to classification according to the latest version of the EU lists.

12 Ecological information

- **General notes:** Generally not hazardous for water

13 Disposal considerations

- **Product:**

- **Recommendation**

Product or residue of product should be recycled because of precious metal content (national regulations must be observed). Material can be returned to supplier or other recycling companies.

If residues of products are classified as waste from administrative bodies or recycling of precious metal is not intended use the legal requirements to assign the European Waste Code (depending on branche of industry and industrial process).

- **Uncleaned packaging:**

- **Recommendation:**

Uncleaned or with product residues contaminated packing should be treated like the product itself.

Packages, which do not contain product residues, should be recycled; if there does not exist a collecting system, packages can be treated as rubbish.

14 Transport information

- **Land transport ADR/RID (cross-border)**

- **ADR/RID class:** -

- **UN-Number:** -

- **Hazard label:** -

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· Maritime transport IMDG:

- **IMDG Class:** -
- **UN Number:** -
- **Label** -

· Air transport ICAO-TI and IATA-DGR:

- **ICAO/IATA Class:** -
- **UN/ID Number:** -
- **Label** -

15 Regulatory information**· Labelling according to EU guidelines:**

The substance is not subject to classification according to EU lists and other sources of literature known to us.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing MSDS: HH-SUS**

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