

No. 809, Chuhua Branch Road, Fengxian District, Shanghai

# SAFETY DATA SHEET

Version: v1

Revision Date: 2023-11-16

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

#### 1.1 Product identifiers

Product name : Palladium chloride

Product Number : P492220

Brand : aladdin

CAS-No. : 7647-10-1

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

Identified uses : Laboratory chemicals, Manufacture of substances

## 1.3 Details of the supplier of the safety data sheet

Company : Shanghai Aladdin Biochemical Tech Co.,Ltd

Address : 36 Xinjinqiao Road, Shanghai

Telephone : 400-620-6333
Fax : no data available

# 1.4 Emergency telephone number

Emergency Phone : 0532-83889090

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Metal corrosives (Category 1), h290 acute toxicity, oral (Category 4), H302

Severe eye injury / eye irritation (Category 1), h318

Skin allergy (Category 1), h317

Acute (short term) aquatic hazard (Category 1), H400

Long term aquatic hazard (Category 1), H410

# 2.2 GHS Label elements, including precautionary statements

Pictogram





Signal word

Hazard statement(s)

Danger



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H290 May be corrosive to metals

H302 Harmful if swallowed

H317 May cause an allergic skin reaction

H318 Causes serious eye damage

H410 Very toxic to aquatic life with long lasting effects

Precautionary statement(s)

P234 Keep only in original container.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 Wash hands [and ...] thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P310 Immediately call a POISON CENTER or doctor/physician.

P390 Absorb spillage to prevent material damage.

P391 Collect spillage.

P302+P352 IF ON SKIN: wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses if present and easy to do - continue rinsing.

P333+P313 IF SKIN irritation or rash occurs: Get medical advice/attention.
P406 Store in corrosive resistant/... container with a resistant inner liner.
P501 Dispose of contents/container to an approved waste disposal plant.

P301+P312+P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.

# 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

## **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Synonyms : PdCl2;Palladium(II) chloride

Formula : Cl2Pd

Molecular weight : 177.33

CAS No. : 7647-10-1

EC-NO. : 231-115-6

Component	Classification	Concentration
Palladium chloride		
	no data available	98% metals basis

#### **SECTION 4: First aid measures**

## 4.1 Description of first aid measures



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General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

In case of skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

In case of eye contact

Rinse with pure water for at least 15 minutes. Consult a doctor.

If swallowed

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

no data available

## **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

Suitable extinguishing media

Use dry chemical, carbon dioxide or alcohol-resistant foam.

Unsuitable extinguishing media

no data available

# 5.2 Special hazards arising from the substance or mixture

Hydrogen chloride gas Non combustible.

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

no data available

#### SECTION 6: Accidental release measures

## 6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.



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# 6.2 Environmental precautions

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

## 6.3 Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

#### 6.4 Reference to other sections

For disposal see section 13.

# **SECTION 7: Handling and storage**

## 7.1 Precautions for safe handling

Operators should be specially trained and strictly abide by the operating procedures. Operation and disposal should be carried out in a place with local ventilation or general ventilation facilities. Avoid eye and skin contact and avoid breathing vapor. See Section 8 for personal protective measures. Keep away from fire and heat sources, and smoking is strictly prohibited in the workplace. Use explosion-proof ventilation systems and equipment. If canning is required, the flow rate should be controlled, and there should be a grounding device to prevent the accumulation of static electricity. Avoid contact with incompatible substances such as oxidizing agents (see section 10 for incompatible substances). When handling, it should be lightly loaded and unloaded to prevent damage to packaging and containers. Empty containers may be harmful residues. Wash hands after use and prohibit eating or drinking in the workplace. Equipped with the corresponding variety and quantity of fire fighting equipment and leakage emer

## 7.2 Conditions for safe storage, including any incompatibilities

Argon flushing storage

## 7.3 Specific end use(s)

no data available

### SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Substances that do not contain occupational exposure limits.

# 8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate



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government standards such as NIOSH (US) or EN166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU)2016/425 and the standard EN 374 derived from it.

**Body Protection** 

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a fullface particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN(EU).

Control of environmental exposure

If safety requires, prevent further leakage or spillage. Do not let the product enter the sewer.

## **SECTION 9: Physical and chemical properties**

# 9.1 Information on basic physical and chemical properties

a) Appearance no data available

b) Odour Very weak, chlorine smell

c) Odour Threshold no data available

d) pH 2.15 at 30 g / L at 20 ° C

e) Melting point/freezing point 678 - 680 °C - lit.
f) Initial boiling point and boiling range no data available g) Flash point no data available h) Evaporation rate no data available i) Flammability (solid, gas) no data available

j) Upper/lower flammability or

no data available explosive limits no data available k) Vapour pressure I) Vapour density no data available no data available m) Relative density n) Water solubility no data available o) Partition coefficient: n-octanol/water no data available p) Auto-ignition temperature no data available q) Decomposition temperature 600 - 740 °C r) Viscosity no data available s) Explosive properties N no data available t) Oxidizing properties N no data available



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# 9.2 Other safety information

no data available

## **SECTION 10: Stability and reactivity**

## 10.1 Reactivity

no data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

# 10.3 Possibility of hazardous reactions

no data available

#### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

no data available

# 10.6 Hazardous decomposition products

no data available

## **SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

Acute toxicity

LD50 oral - rat - male - 576 mg / kg remarks: (ECHA)

Inhalation: no data

Percutaneous: no data

Skin corrosion/irritation

Skin rabbit results: according to the existing data, the classification conditions cannot be met- 4 h (OECD Test

Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit Results: irreversible effects on eyes

Respiratory or skin sensitisation Human feelings Result: positive

Germ cell mutagenicity

Test type: Ames test Test system: Salmonella typhimurium Metabolic activation: with or without metabolic



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activation Method: OECD Test Guideline 471 Results: negative

Carcinogenicity

no data available

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

**Additional Information** 

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

# **SECTION 12: Ecological information**

## 12.1 Toxicity

Semi static toxicity test for fish LC50 - Oncorhynchus mykiss (rainbow trout) - 0.154 mg / L - 96 h (OECD Test Guideline 203) remarks: (for cations)

Static toxicity test for Daphnia magna and other aquatic invertebrates EC50 - Daphnia magna - 0.035 mg / L - 48 h (OECD Test Guideline 202) remarks: (for cations)

Static toxicity test on algae erc50 - pseudokirchnerella subcapitata (green algae) - 0.00296 mg / L - 72 h remarks: (ECHA)

## 12.2 Persistence and degradability

no data available

### 12.3 Bioaccumulative potential

no data available

#### 12.4 Mobility in soil

no data available

### 12.5 Results of PBT and vPvB assessment

The PBT / vpvb assessment is not available because the chemical safety assessment is not required / carried out

### 12.6 Other adverse effects

no data available

#### **SECTION 13:**



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### 13.1 Disposal considerations

Product

Recycle to process, if possible. Consult your local regional authorities and an expert of disposal. You may be able to dissolve or mix material with a combustible solvent and little by little burn in a chemical incinerator equipped with an afterburner and scrubber system. If a large amount of the substance is burned at a time, an explosion may occur. Observe all federal, state and local regulations when disposing of the substance.

Contaminated packaging

Dispose of as unused product.

# **SECTION 14: Transport information**

DOT (US)

UN number: 3262 Packing group: III Class: 8

Proper shipping name: no data Reportable Quantity(RQ): no data Poison Inhalation Hazard: no data

available available available

Environmental Hazards: yes

**IMDG** 

UN number: 3262 Packing group: III EMS-No: no data available

Proper shipping name: no data available

IATA

UN number: 3262 Packing group: III Class: 8

Proper shipping name: no data available

## **SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### **SECTION 16: Other information**

Further information

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