



# Material Safety Data Sheet

## Section 1: Chemical Product and Company Identification

**Product Name:** Palladium Chloride  
**CAS No:** 7647-10-1  
**Chemical Formula:** PdCl<sub>2</sub>

**Contact Information:**  
Bangalore Refinery Private Limited  
No.6/1, Plot No. 20A, KIADB Main Road,  
1st Cross, 1st, Phase, Peenya , Industrial Area  
Bangalore-560 058.  
**Tele-Phone :** +91-9845028000 / +91-80-41141999  
**E-mail :** rand@bangalorerefinery.com  
ketan@bangalorerefinery.com  
enquiry@bangalorerefinery.com

## Section 2: Composition and Information on Ingredients

### Composition:

Name	CAS No	% by Weight
Palladium Chloride	7647-10-1	100

**Toxicological Data on Ingredients:** Palladium chloride: ORAL (LD50): Acute: 2704 mg/kg [Rat]. >1000 mg/kg [Mouse].

## Section 3: Hazards Identification

### Potential Acute Health Effects:

Hazardous in case of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant, sensitizer).

### Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

## Section 4: First Aid Measures

### **Eye Contact:**

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

### **Skin Contact:**

Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

Serious Skin Contact: Not available.

### **Inhalation:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

### **Ingestion:**

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.

## Section 5: Fire and Explosion Data

**Flammability of the Product:** Non-flammable.

**Auto-Ignition Temperature:** Not applicable.

**Flash Points:** Not applicable.

**Flammable Limits:** Not applicable.

**Products of Combustion:** Not available.

**Fire Hazards in Presence of Various Substances:** Not applicable.

### **Explosion Hazards in Presence of Various Substances:**

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

**Fire Fighting Media and Instructions:** Not applicable.

**Special Remarks on Fire Hazards:** Not available.

**Special Remarks on Explosion Hazards:** Not available.

## **Section 6: Accidental Release Measures**

### **Small Spill:**

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

### **Large Spill:**

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

## **Section 7: Handling and Storage**

### **Precautions:**

Do not ingest. Do not breathe dust. Avoid contact with eyes. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as metals, acids.

### **Storage:**

Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 24°C (75.2°F).

## **Section 8: Exposure Controls/Personal Protection**

### **Engineering Controls:**

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

### **Personal Protection:**

Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

### **Personal Protection in Case of a Large Spill:**

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:** Not available.

## Section 9: Physical and Chemical Properties

**Physical state and appearance:** Solid. (Amorphous solid powder or lumps. Deliquescent solid.)

**Odour:** Not available.

**Taste:** Not available.

**Molecular Weight:** 177.3 g/mole

**Colour:** Red-Brown. (Dark.)

**pH (1% solution/water):** Not available.

**Boiling Point:** Not available.

**Melting Point:** 679°C (1254.2°F)

**Critical Temperature:** Not available.

**Specific Gravity:** 4 (Water = 1)

**Vapour Pressure:** Not applicable.

**Vapour Density:** Not available.

**Volatility:** Not available.

**Odour Threshold:** Not available.

**Water/Oil :** Not available.

**Ionicity (in Water):** Not available.

**Dispersion Properties:** See solubility in water, acetone.

**Solubility:** Soluble in cold water, acetone, hydrobromic acid.

## Section 10: Stability and Reactivity Data

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions of Instability:** Excess heat, moisture, incompatible materials

**Incompatibility with various substances:** Reactive with metals, acids.

**Corrosivity:** Non-corrosive in presence of glass.

**Special Remarks on Reactivity:**

Incompatible with organic solvents, acids, NH<sub>3</sub>, Zn, strong oxidizing agents, aluminium, magnesium, nitrates, thiocyanates.

**Special Remarks on Corrosivity:** Not available.

**Polymerization:** Will not occur.

## Section 11: Toxicological Information

**Routes of Entry:** Inhalation. Ingestion.

**Toxicity to Animals:** Acute oral toxicity (LD<sub>50</sub>): >1000 mg/kg [Mouse].

**Chronic Effects on Humans:** Not available.

**Other Toxic Effects on Humans:**

Hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant, sensitizer).

**Special Remarks on Toxicity to Animals:** Not available.

**Special Remarks on Chronic Effects on Humans:**

May cause adverse reproductive effects and cancer based on animal data. May affect genetic material.

**Special Remarks on other Toxic Effects on Humans:**

Acute Potential Health Effects: Skin: Causes skin irritation. May affect metabolism if absorbed through skin.

Eyes: Causes eye irritation. May cause chemical conjunctivitis. Ingestion: May cause gastrointestinal tract irritation with nausea, vomiting and diarrhoea. May affect blood, immunological system, and metabolism

Inhalation: Causes respiratory tract and mucous membrane irritation.

## Section 12: Ecological Information

**Eco-toxicity:** Not available.

**BOD<sub>5</sub> and COD:** Not available.

**Products of Biodegradation:**

Possibly hazardous short term degradation products are not likely. However, long term degradation

products may arise.

**Toxicity of the Products of Biodegradation:**

The product itself and its products of degradation are not toxic.

**Special Remarks on the Products of Biodegradation:** Not available.

### Section 13: Disposal Considerations

**Waste Disposal:**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

### Section 14: Transport Information

**Classification:** Not Available.

**Identification:** Not Applicable.

**Special Provisions for Transport:** Not Applicable.

### Section 15: Other Regulatory Information

**Protective Equipment:**

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Splash goggles.

### Section 16: Other Information

**References:** Not available.

**Other Special Considerations:** Not available.

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Bangalore Refinery Pvt Ltd. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Bangalore Refinery Pvt Ltd. has been advised of the possibility of such damages.*

