

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Palladium (II) Chloride

Product Number: PD070

CAS Number: 7647-10-1

EC Number: 231-596-2

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

Identified Use: Manufacturing, Electronic component, Research and Development

Manufacturer/Supplier:

J & J Materials, Inc.

49 Laurel Avenue

Neptune City, NJ 07753

Tel: 732-988-3300

Fax: 732-774-1807

Email: sales@jandjmaterials.com

www.jandjmaterials.com

Emergency Phone Number: 1-800-222-1222 (National Capital Poison Center)

2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

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

Acute toxicity, Oral (Category 3), H301 Toxic if swallowed.

Eye irritation (Category 2A), H319 Causes serious eye irritation.

Skin sensitization (Category 1), H317 May cause an allergic skin reaction.

GHS Label elements, including precautionary statements

Pictogram



Signal Word

Danger

Hazard statement(s)

H301

H317

H319

Toxic if swallowed.

May cause an allergic skin reaction.

Causes serious eye irritation.

Precautionary statement(s)

P261

P264

Avoid breathing dust/fume/gas/mist/vapors/spray.

Wash skin 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.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302 + P352	IF ON SKIN: Wash with plenty of soap and 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.
P330	Rinse mouth.
P333 + P313	If skin irritation or rash occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/ attention.
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Palladium(II) chloride

Formula	PdCl ₂
CAS-No.	7647-10-1
EC-No.	231-596-2

4. FIRST AID MEASURES

Description of first aid measures

General advice

Consult a physician and have this safety data sheet handy.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and water and take victim to hospital immediately.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in sections 2 and 11.

Indication of any immediate medical attention and special treatment needed

No data available

5. FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

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

Special hazards arising from the substance or mixture

Hydrogen Chloride gas

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

No data available

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust. Also see section 8.

Environmental precautions

Prevent further leakage or spillage. Do not let product enter drains.

Methods and materials for containment and cleaning up

Sweep up and shovel without creating dust. Hold in tightly sealed containers and arrange for disposal according to local government regulations.

Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

Precautions for safe handling

Contact with skin and eyes should be avoided. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation.

Conditions for safe storage, including any incompatibilities.

Tightly sealed containers should be used for storage. Keep in a cool, dry and well-ventilated area.

Specific end use(s)

No other specific uses.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components with workplace control parameters

This product does not contain relevant materials with critical values that have to be monitored at the workplace.

Exposure controls

Appropriate engineering controls

Contact with skin, eyes and clothing should be avoided. Wash hands before and immediately after handling the product.

Personal protective equipment

Eye/face protection

Use safety glasses and face shields. Use equipment for eye protection tested and approved under appropriate government standards.

Skin protection

Proper gloves should be worn when handling this product. Gloves must be inspected prior to use and removed without touching glove's outer surface.

Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

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 full-face particle respirator. If the respirator is the sole means of protection, use a full-face air respirator. Use respirators and components tested and approved under appropriate government standards.

Control of environmental exposure

If safe to do so, prevent further spillage. Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

a) Appearance	Form: Powder, brown
b) Odor	No data available
c) Odor Threshold	No data available
d) pH	No data available
e) Melting point/freezing point	No data available
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 explosive limits	No data available
k) Vapor pressure	No data available
l) Vapor density	No data available
m) Relative density	4 g/cm ³ at 25° C (77° F)
n) Water solubility	No data available
o) Partition coefficient: Noctanol/water	No data available
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	No data available

Other safety information

No data available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available

Conditions to avoid

No data available

Incompatible materials

No data available

Hazardous decomposition products

No data available

11. TOXICOLOGICAL INFORMATION

Information toxicological effects

Acute toxicity

Inhalation: No data available

Dermal: No data available

LD50 Oral – Rat 2704 mg/kg

LD50 Oral – mouse > 1000 mg/kg

LD50 Oral – Rat 200 mg/kg

Skin corrosion/irritation

Irritant to skin and mucous membranes

Serious eye damage/eye irritation

Irritating effect.

Respiratory or skin sensitization

Not data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive Toxicity

Rat – Intratesticular

Paternal Effect: Spermatogenesis (including genetic material, sperm morphology, motility, and count). Paternal Effects: Testes, epididymis, sperm duct.

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

RTECS: RT3500000

12. ECOLOGICAL INFORMATION

Toxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION**DOT (US)**

UN number: 3288 Class: 6.1 Packing group: III

Proper shipping name: Toxic solid, inorganic, n.o.s. (Palladium dichloride)

Poison Inhalation Hazard: No

IMDG

UN number: 3288 Class: 6.1 Packing group: III EMS-No: F-A, S-A

Proper shipping name: TOXIC SOLID, INORGANIC, N.O.S. (Palladium dichloride)

IATA

UN number: 3288 Class: 6.1 Packing group: III

Proper shipping name: Toxic solid, inorganic, n.o.s. (Palladium dichloride)

15. REGULATORY INFORMATION**SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right to Know Components

Palladium dichloride CAS No. : 7647-10-1

New Jersey Right to Know Components

Palladium dichloride CAS No. : 7647-10-1

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

HMIS Rating

Health hazard: 2

Chronic Health Hazard:

Flammability: 0

Physical Hazard: 0

NFPA Rating

Health Hazard: 3

Fire Hazard: 0

Reactivity Hazard: 0

Further Information

Version: 4.1 Rev Date: 5/15/2018

This Safety Data Sheet is provided in accordance with OSHA Hazard Communications Standard 2.9 C.F.R. 1910.1200.

Purchasing company is wholly responsible for the safe use of this material and to insure that this material is used and handled by individuals with proper chemical hygiene training and experience with hazardous materials.

Safety Data Sheets should be made available to all employees with potential contact with this product.

J&J Materials has listed all known hazards and handling precautions associated with this product. J&J Materials is not responsible for typographical errors or omissions in this document. J&J Materials believes the contained information to be accurate but reserves the right to update and make changes as more information becomes available.