



SECTION 1: Product Identification

Chemical Name: Palladium (II) nitrate hydrate(Pd approx. 40%) (99.9%-Pd)

Product Number: 123

CAS Registry Number: 10102-05-3

Formula: $\text{Pd}(\text{NO}_3)_2 \cdot \text{XH}_2\text{O}$

EINECS Number: 233-265-8

Chemical Family: metal nitrate salts

Synonym: Palladium dinitrate, Nitric acid, palladium (+2) salt

SECTION 2: Composition and Information on Ingredients

Ingredient	CAS Number	Percent	ACGIH (TWA)	OSHA (PEL)
Title Compound	10102-05-3	100	no data	no data

SECTION 3: Hazards Identification

Emergency Overview: Irritating to eyes, skin and respiratory tract. May be harmful if swallowed.

Primary Routes of Exposure: Ingestion

Eye Contact: Causes slight to mild irritation of the eyes

Skin Contact: Causes slight to mild irritation of the skin.

Inhalation: Irritating to the nose, mucous membranes and respiratory tract.

Ingestion: Ingestion may lead to dizziness, abdominal cramps, vomiting, bloody diarrhea, weakness, and convulsions.

Acute Health Effects: Irritating to skin, eyes and respiratory tract.

Chronic Health Effects: No information available on long-term chronic effects.

NTP: No

IARC: No

OSHA: No

SECTION 4: First Aid Measures



Eye Exposure:	Immediately flush the eyes with copious amounts of water for at least 10-15 minutes. A victim may need assistance in keeping their eye lids open. Get immediate medical attention.
Skin Exposure:	Wash the affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.
Inhalation:	Remove the victim to fresh air. Closely monitor the victim for signs of respiratory problems, such as difficulty in breathing, coughing, wheezing, or pain. In such cases seek immediate medical assistance.
Ingestion:	Seek medical attention immediately. Keep the victim calm. Give the victim water (only if conscious). Induce vomiting only if directed by medical personnel.
SECTION 5: Fire Fighting Measures	
Flash Point:	not applicable
Autoignition Temperature:	none
Explosion Limits:	none
Extinguishing Medium:	carbon dioxide, foam or dry powder
Special Fire Fighting Procedures:	If this product is involved in a fire, fire fighters should be equipped with a NIOSH approved positive pressure self-contained breathing apparatus and full protective clothing.
Hazardous Combustion and Decomposition Products:	If involved in a fire this material may emit irritating fumes.
Unusual Fire or Explosion Hazards:	Metal nitrates can be oxidizers. Contact with strong reducing agents could lead to fires and/or explosions.
SECTION 6: Accidental Release Measures	
Spill and Leak Procedures:	Small spills can be mixed with vermiculite or sodium carbonate and swept up.
SECTION 7: Handling and Storage	
Handling and Storage:	Store in a tightly sealed container. Keep away from heat and direct sunlight.
SECTION 8: Exposure Controls and Personal Protection	
Eye Protection:	Always wear approved safety glasses when handling a chemical substance in the



laboratory.

Skin Protection: Wear protective clothing and gloves

Ventilation: If possible, handle the material in an efficient fume hood.

Respirator: If ventilation is not available a respirator should be worn. The use of respirators requires a Respiratory Protection Program to be in compliance with 29 CFR 1910.134.

Additional Protection: No additional protection required.

SECTION 9: Physical and Chemical Properties

Color and Form: brown xtl.

Molecular Weight: 230.72

Melting Point: dec.

Boiling Point: no data

Vapor Pressure: not applicable

Specific Gravity: no data

Odor: none

Solubility in Water: very soluble

SECTION 10: Stability and Reactivity

Stability: air and moisture stable

Hazardous
Polymerization: no hazardous polymerization

Conditions to Avoid: Contact with strong reducing agents or organic matter. Some nitrates can explode if heated to high temperatures.

Incompatibility: reducing agents, organic matter, phosphorus and sulfur

Decomposition
Products: nitrogen oxides and palladium salts

SECTION 11: Toxicological Information

RTECS Data: Intraperitoneal (rat); DNA inhibition: 56 umol/kg.

Carcinogenic Effects: No data available



Mutagenic Effects: Possible mutagenic effects reported in RTECS

Tetratogenic Effects: No data available

SECTION 12: Ecological information

Ecological Information: No data available

SECTION 13: Disposal Considerations

Disposal: Dispose of according to local, state and federal regulations.

SECTION 14: Transportation

Shipping Name (CFR): Nitrates, Inorganic, N.O.S.

Hazard Class (CFR): 5.1

Additional Hazard
Class (CFR): NA

Packaging Group
(CFR): II

UN ID Number (CFR): UN# 1477

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(IATA): Nitrates, Inorganic, N.O.S.

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Class (IATA): NA

Packaging Group
(IATA): II

UN ID Number (IATA): UN# 1477

SECTION 15: Regulatory Information

TSCA: Listed in the TSCA inventory.

SARA (Title 313): Title Compound: See Category Code N511 for reporting.

Second Ingredient: none

Third Ingredient: none