



## **1 Product and Company Information:**

Product name: **Highly crystalline graphene supported palladium nanocrystals in acetone**

Catalog Number(s): (CGPD-050), (CGPD-200)

Manufacturer/Supplier: 2W iTech, LLC

7964 Arjons Dr Suite G - San Diego, CA 92126

Web Site: [www.2WiTech.com](http://www.2WiTech.com)

Fax: 858-689-8809 | Tel: 858-689-8808

M-F: 8 a.m. - 5 p.m. PST

## **2 Composition/Information on Ingredients:**

CAS Name/Number: Carbon/7782-42-5; Palladium/7440-05-3; Acetone/67-64-1

## **3 Hazards identification**

Emergency Overview: The health hazards of this product have not been fully tested and should be used with caution.

Not all potential health effects are listed here.

Health Hazards: Exposure to skin, eyes, and respiratory tract could cause irritation.

Physical Hazards: Flammable

POTENTIAL HEALTH EFFECTS

Inhalation: Possible irritation to respiratory tract and symptoms of nausea. Headache, drowsiness, dizziness, disorientation, sleep disturbances, loss of coordination, dilated pupils, kidney damage and liver damage.

Skin Contact: Possible irritation

Eye Contact: Possible irritation

Ingestion: Possible stomach pain and symptoms of nausea. Headache, drowsiness, dizziness, disorientation, sleep disturbances, loss of coordination, dilated pupils. Damage to kidney or liver.

## **4 First aid measures**

Skin Contact: Wash the skin thoroughly with soap and water and seek medical advice.

Eye contact: If eye contact occurs, rinse eye thoroughly and seek medical advice

Inhalation: If inhaled, supply fresh air or respirator and seek medical advice.

Ingestion: If swallowed, seek medical attention immediately

## **5 Fire fighting measures**

Extinguishing Media: The product is not flammable. In case of fire use dry chemical powder or foam extinguisher.

## **6 Accidental release measures**

Personal Precautions: Always use proper protective equipment.

Environmental Precautions: Do not allow material to reach drains or ground water.

Cleanup of small spills: Use appropriate material to absorb liquid.

Disposal: Collect and dispose of all waste in an appropriate container.

## **7 Handling and storage**

Handling: Follow safe laboratory practices. The product should only be used by or closely supervised by an individual trained to handle potentially hazardous materials.

Storage: Store at 4-24 °C in a tightly sealed container. Store in same type of container (glass/plastic) as shipped. Do not freeze. Best kept dilute at low concentration (approx. 5 mg/ml) Larger sized nanoparticles need to be stored at lower concentrations.

The product may be shipped at a higher concentration to meet the order requirement and to conform to 49 CFR 173.4.

## **8 Exposure controls and personal protection**

Engineering Controls: Use fume hood with proper ventilation. Only a properly trained lab technician should handle this product.

Personal Protection: Gloves, lab coat, and goggles. Proper laboratory safety procedures should be implemented.

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

Form: Liquid. Possible settling could occur based on storage methods.

Color: Gray black

Specific Gravity: Not disclosed

Odor: Not disclosed

Solubility in Water: Not soluble

Boiling point: Not disclosed

pH: Not disclosed

Freezing point: Not disclosed

Melting point: Not disclosed

Vapor Pressure: Not disclosed

## **10 Stability and reactivity**

Stability: Not determined

Conditions to avoid: Not fully determined.

Thermal decomposition: Not determined. May produce toxins.

Materials to avoid: Not fully determined.

## **11 Toxicological information**

RTECS Number: Not disclosed

Toxicity: Not disclosed

Health Hazards: Refer to section 4

Carcinogenicity: No information is available

## **12 Ecological information:**

No data available. See section 6 environmental precautions.

## **13 Disposal considerations**

Dispose of in accordance with local, state, or national regulations.

## **14 Transport information**

U.S. DOT Classification: Class 6.1

Identification Number: UN1888

Packing Group: III

Exceptions: 49 CFR 173.4 for small quantities of hazardous materials less than 30 ml (Chloroform)

## **15 Regulations**

No data available for TSCA, EEC EINECS number, EEC risk statements, or other regulations.

## **16 Other information:**

Disclaimer: For R&D only. Not intended for food, drug, household, agricultural or cosmetic use.

The above information is believed to be correct. 2W iTech LLC shall not be held liable for any damage resulting from handling or contact with the above product.



