

<a href="#">Palladium Dioxide</a>		<a href="#">Pricing &gt;</a>
<b>Linear Formula</b>	PdO <sub>2</sub>	
<b>Pubchem CID</b>	82845	
<b>MDL Number</b>	MFCD00054017	
<b>EC No.</b>	234-836-4	
<b>IUPAC Name</b>	dioxopalladium	
<b>Beilstein/Reaxys No.</b>	N/A	
<b>SMILES</b>	O=[Pd]=O	
<b>Inchl Identifier</b>	InChI=1S/2O.Pd	
<b>Inchl Key</b>	OHQLYLRYQSZVLV-UHFFFAOYSA-N	
<b>Signal Word</b>	Warning	
<b>Hazard Statements</b>	H302-H312-H315-H319-H332-H335	
<b>Hazard Codes</b>	Xi	
<b>Risk Codes</b>	36/37/38	
<b>Safety Statements</b>	26-36	
<b>RTECS Number</b>	N/A	
<b>Transport Information</b>	N/A	
<b>WGK Germany</b>	3	

[Create Printable PDF](#)

## SAFETY DATA SHEET

Date Accessed: 04/24/2024

Date Revised: 01/15/2022

### SECTION 1. IDENTIFICATION

**Product Identifiers:** All applicable American Elements product codes for CAS #12036-04-3

**Relevant identified uses of the substance:**

Scientific research and development

Supplier details:

American Elements  
10884 Weyburn Ave.  
Los Angeles, CA 90024  
Tel: +1 310-208-0551  
Fax: +1 310-208-0351

Emergency telephone number:

Domestic, North America +1 800-424-9300  
International +1 703-527-3887

---

## SECTION 2. HAZARDS IDENTIFICATION

Statement of Hazard: Irritant, Respiratory irritant

Acute Health Hazard: Irritant to eyes, skin, mucous membranes and respiratory system.

May be harmful by ingestion, skin absorption and inhalation.

Chronic Health Hazard: Not Available

HMIS Rating: H:1 F:0 P:0

NFPA Rating: H:1 F:0 R:0

To the best of our knowledge, the toxicological properties of this chemical have not been thoroughly investigated. Use appropriate procedures and precautions to prevent or minimize exposure.

Pictogram:



Signal Word: Warning

Hazard Statement(s): H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

Precautionary Statement(s): P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

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

P301+P312 IF SWALLOWED: call a POISON CENTER or doctor/physician

IF you feel unwell.

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

P304+P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P332+P313 IF SKIN irritation occurs: Get medical advice/attention.

---

### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name: Palladium dioxide hydrate 99.99%  
CAS Number: 12036-04-3  
MDL Number: MFCD00054017  
EINECS Number: 234-836-4  
Beilstein Registry Number: Not Available  
Molecular Formula: PdO<sub>2</sub>.xH<sub>2</sub>O  
Molecular Weight: 138.42  
Content: As specified in product name.

---

### **SECTION 4. FIRST AID MEASURES**

Eye Contact: Flush eyes with large amounts of water for fifteen minutes. Separate eyelids with fingers. If irritation persists, seek medical attention.  
Skin Contact: Wash skin with soap and water. If irritation persists, seek medical attention.  
Ingestion: Do not induce vomiting. Seek medical attention.  
Inhalation: Move to a fresh air environment. Contact a physician if breathing becomes difficult.

---

### **SECTION 5. FIREFIGHTING MEASURES**

Flash Point (°C): Not Available  
Explosion Limits: Not Available  
Auto Ignition  
Temperature (°C):  
Not Available  
Extinguishing Media: Carbon dioxide, dry chemical powder, alcohol-resistant foam, or water spray  
Protective Equipment: Wear self-contained respirator and fully protective impervious suit.  
Specific Hazards: May emit hazardous fumes under fire conditions.

---

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal Protection: Wear a self-contained breathing apparatus, rubber boots and gloves, and disposable coveralls. Dispose of coveralls after use. Remove from ignition sources if safe to do so. Follow emergency response plan and contact proper authorities if needed.

Keep unprotected persons away.

Environmental Protection: Keep spills out of sewers and bodies of water. Dike and contain the spill with inert material. Absorb on sand, vermiculite or diatomite.

Transfer material to a container for disposal or recovery. Ventilate area and wash spill site after material pickup is complete.

---

## **SECTION 7. HANDLING AND STORAGE**

Handling and Storage: Avoid breathing dust, vapor, mist or gas. Avoid contact with skin and eyes. Avoid prolonged or repeated exposure. Use only in a chemical fume hood. Open and handle container with care. Keep ignition sources away.

Store in a tightly closed container in a dry, well-ventilated place.

Sensitivities:

Storage Temperature (°C):

Not Available

15 to 30

---

## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Engineering Controls: Use product in a well ventilated area or under a fume hood. Use proper lab equipment while handling this product. Keep away from incompatible materials for possible risk of hazardous reaction.

Eye Protection: Wear appropriate protective eyeglass or chemical safety goggles. Make sure that there is an eyewash station in your vicinity.

Skin Protection: Wear impervious gloves and protective clothing.

Respiratory Protection: Use a NIOSH approved

respirator when exposure limits are exceeded or if irritation or other symptoms are experienced.  
Exposure Limits: Country Source Type Value  
USA ACGIH TWA Not Available  
USA OSHA STEL Not Available  
USA OSHA PEL Not Available

---

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance: Dark red to black powder  
Odor: Not Available  
Odor Threshold: Not Available  
Flash Point (°C): Not Available  
Auto Ignition  
Temperature (°C): Not Available  
UEL % by Volume: Not Available  
LEL % by Volume: Not Available  
Melting Point (°C): Not Available  
Boiling Point (°C): Not Available  
Evaporation Rate: Not Available  
pH Value: Not Available

Density (g/cm<sup>3</sup>): Not Available  
Refractive Index (n<sup>20</sup>D): Not Available  
Viscosity: Not Available  
Solubility in Water: Not Available  
Solubility in Other: Not Available  
Vapor Pressure (mmHg): Not Available  
Vapor Density (Air=1): Not Available

---

## **SECTION 10. STABILITY AND REACTIVITY**

Stability: Stable under normal temperatures and pressures.  
Incompatibility: Strong oxidizing agents  
Reactivity: Product may react with incompatible materials to release other hazardous substances.  
Conditions to Avoid: Heat, flame, sparks, other ignition sources.  
Hazardous  
Decomposition Products:  
Palladium oxides

---

## **SECTION 11. TOXICOLOGICAL INFORMATION**

RTECS Reference:  
Target Organs: Not Available

Not Available  
Toxicity Data: Not Available  
National Toxicology Program (NTP) listed:  
Not Available  
Carcinogenicity:  
International Agency for Research on Cancer (IARC)  
listed:  
Not Available  
Potential Symptoms: Not Available

---

## **SECTION 12. ECOLOGICAL INFORMATION**

Toxicity: Not Available

---

## **SECTION 13. DISPOSAL CONSIDERATIONS**

Contact a licensed professional waste disposal  
service. Dispose in a manner consistent with  
federal, state and local environmental regulations.

---

## **SECTION 14. TRANSPORT INFORMATION**

DOT: Not Regulated  
IATA: Not Regulated  
IMDG: Not Regulated

---

## **SECTION 15. REGULATORY INFORMATION**

United States  
Toxic Substance Control Act (TSCA) listed: Yes  
Superfund Amendments and Reauthorization Act  
(SARA 302) listed: No  
Superfund Amendments and Reauthorization Act  
(SARA 311/312) listed: No  
Superfund Amendments and Reauthorization Act  
(SARA 313) listed: No  
European Union  
European Inventory of Existing Chemical Substances  
(EINECS): 234-836-4  
Canada  
Canadian Non-Domestic Substances List (NDSL)  
listed: Yes  
Canadian Domestic Substances List (DSL) listed: No

---

## 16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.

---