



LTS Research Laboratories, Inc.  
Safety Data Sheet  
Iron Palladium Alloy

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1. Product and Company Identification

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Trade Name: Iron Palladium Alloy  
Chemical Formula: FePd  
Recommended Use: Scientific research and development

Manufacturer/Supplier: LTS Research Laboratories, Inc.  
Street: 37 Ramland Road  
City: Orangeburg  
State: New York  
Zip Code: 10962  
Country: USA  
Tel #: 855-587-2436 / 855-lts-chem

24-Hour Emergency Contact: 800-424-9300 (US & Canada)  
+1-703-527-3887 (International)

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2. Hazards Identification

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Signal Word: Danger



Hazard Statements: H228: Flammable Solid  
H251: Self heating, may catch fire  
H315: Causes skin irritation  
H319: Causes serious eye irritation  
H335: May cause respiratory irritation

Precautionary Statements: P210: Keep away from heat/sparks/open flames/hot surfaces- No smoking.  
P235+P410: Keep cool. Protect from sunlight.  
P240: Ground/bond container and receiving equipment.  
P241: Use explosion-proof electrical/ventilating/lighting/equipment  
P261: Avoid breathing dust/fume/gas/mist/vapors/spray  
P264: Wash face, hands and any exposed skin thoroughly after handling.  
P271: Use only outdoors or in a well-ventilated area  
P280: Wear protective gloves/protective clothing/eye protection/face protection  
P302+P350: IF ON SKIN: Wash gently with plenty of soap and water  
P304+P341: IF INHALED: If breathing is difficult, remove victim to fresh air and keep a rest in a position comfortable for breathing.  
P362: Take off contaminated clothing and wash before reuse.  
P370: In case of fire: Use CO2, dry chemical or foam for extinction.  
P403+P233: Store in a well-ventilated place. Keep container tightly closed.  
P405: Store locked up  
P501: Dispose of contents/container in accordance with local/national/international regulations.

HMIS Health Ratings (0-4):

Health:	2
Flammability:	3
Physical:	0

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3. Composition

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Chemical Family:	Alloy
Additional Names:	Palladium Iron alloy

Iron (Fe):	
Percentage:	0-100 wt%
CAS #:	7439-89-6
EC #:	231-096-4

Palladium (Pd):	
Percentage:	0-100 wt%
CAS #:	7440-05-3
EC #:	231-115-6

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4. First Aid Procedures

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General Treatment:	Seek medical attention if symptoms persist.
Special Treatment:	None
Important Symptoms:	None
Inhalation:	Remove victim to fresh air. Supply oxygen if breathing is difficult. Give artificial respiration proper respiratory medical device. Seek medical attention.
Ingestion:	Clean mouth with water. Seek medical attention immediately.
Skin:	Wash affected area with soap and plenty of water. Remove all contaminated clothing and shoes. Seek medical attention.
Eyes:	Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

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5. Firefighting Measures

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Flammability:	Flammable. Risk of ignition, self-heating. Dust can form explosive mixture in air.
Extinguishing Media:	Do not use water, foam or carbon dioxide (CO <sub>2</sub> ). Use extinguishing powder or dry chemical.
Spec. Fire Fighting Procedure:	Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. See section 10 for decomposition products.

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6. Accidental Release Measures

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If Material Is Released/Spilled:	Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal. Keep unprotected personnel away. Take care not to raise dust. Remove all sources of ignition. Use spark proof tools and explosion proof equipment. Do not let this chemical enter the environment.
Environmental Precautions:	Isolate runoff to prevent environmental pollution. Do not flush into surface water or sanitary sewer system.

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## 7. Handling and Storage

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Handling Conditions:	Wash thoroughly after handling. Wear personal protective equipment. Avoid inhalation and ingestion. Avoid dust formation. Do not let it get in to eyes, on skin or on clothing. Do not ingest. Do not breathe dust. Ensure adequate ventilation. Use only non-sparking tools and explosion proof equipment.
Storage Conditions:	Store in a cool dry place in a tightly sealed container. Keep away from sources of heat and ignition. Store apart from materials and conditions listed in section 10.
Work/Hygienic Maintenance:	Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.
Ventilation:	Provide sufficient ventilation to maintain concentration at or below threshold limit.

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## 8. Exposure Controls and Personal Protection

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Permissible Exposure Limits:	N/A
Threshold Limit Value:	5 mg/m3 as Fe, long-term value
Special Equipment:	None
Respiratory Protection:	Dust Respirator
Protective Gloves:	Nitrile rubber gloves
Eye Protection:	Safety glasses or goggles
Body Protection:	Protective work clothing. Wear close-toed shoes and long sleeves/pants.

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## 9. Physical and Chemical Characteristics

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Color	Gray-Dark gray
Form:	Powder, Granules, Pellets, Sputtering target, Custom parts
Odor:	Odorless
Water Solubility:	Insoluble
Boiling Point:	N/A
Melting Point:	N/A
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	N/A
Molecular weight:	N/A

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## 10. Reactivity

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Stability:	Moisture Sensitive
Reacts With:	Oxidizing agents, Acids, Fluorine, Halogenated agents, Halogens, Oxygen, Nitriles, Aldehydes, Peroxides
Incompatible Conditions:	Moisture
Hazardous Decomposition Products:	Metal oxide fume

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## 11. Toxicological Information

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### Potential Health Effects:

Eyes:	Causes serious eye irritation
Skin:	Causes irritation
Ingestion:	May cause irritation
Inhalation:	May cause irritation
Chronic:	N/A

Signs & Symptoms: N/A

Aggravated Medical Conditions: N/A

Median Lethal Dose: 30 g/kg for rat by mouth

Carcinogen: N/A

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## 12. Ecological Information

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Aquatic Toxicity: N/A

Persistent Bioaccumulation Toxicity: N/A

Very Persistent, Very Bioaccumulative: N/A

Notes: Contains components harmful to aquatic organisms. Do not empty into drains. Insoluble in water.

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## 13. Disposal Considerations

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Dispose of in accordance with local, state, national, and international regulations.

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## 14. Transportation Data

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Hazardous: Hazardous for transportation



Hazard Class: 4.2 Spontaneously Combustible materials

Packing Group: II

UN Number: UN3190

Proper Shipping Name: Self-heating solid, inorganic, n.o.s

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## 15. Regulatory Information

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Sec 302 Extremely Hazardous: N/A

Sec 304 Reportable Quantities: N/A

Sec 313 Toxic Chemicals: N/A

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## 16. Other Information

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This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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