## Kurt J. Lesker Company

Palladium metal, powder and pieces

Manufacturer MSDS Number: Pd



## SECTION 1: Chemical Product and Company Identification

MSDS Name: Palladium metal, powder and pieces Manufacturer Name: Kurt J. Lesker Company

Address:

P.O. Box 10 1925 Route 51 Clairton, PA 15025

For emergencies in the US, call CHEMTREC: 800-424-9300

Other Phone: US National Poison Hotline: (800)222-1222

Manufacturer MSDS Creation Date:

06/30/2006

Manufacturer MSDS Revision Date:

06/25/2008

Synonyms:

Palladium metal.

Chemical Family: Metal Chemical Formula: Pd Molecular Weight: 106.42

DOT HAZARD LABEL

No data.

Product Codes:

Pd

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	SECTION 2 : Hazardou	s Ingredients/Identity Information	
Chemical Name Palladium metal	<b>CAS#</b> 7440-05-3	% Weight 0.0 -100.0 %	
r alladium metal	7440 03 3	0.0 100.0 %	

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# SECTION 3: Physical And Chemical Characteristics

Physical State/Appearance:

Gray-black powder and silver-white, metallic pieces, no odor. .

Physical State:

[] Gas , [] Liquid , [X] Solid

pH;

No data.

Vapor Pressure:

NA (VS. AIR OR MM HG)

Vapor Density:

NA (VS. AIR = 1) Boiling Point: 2970.00 deg C (5378.0 deg F) to 3167.00 deg C (5732.6 deg F) Melting Point 1554.00 deg C (2829.2 deg F) to N.A. Solubility In Water: insoluble Specific Gravity: 12.02 g/cc at 20.0 C (68.0 F) (WATER = 1) Density: No data. Evaporation Point:

NA (VS BUTYL ACETATE=1)

Percent Volatile:

N.A.

FlashPoint:

N.A.

Upper Flammable Explosive Limit:

NA

Lower Flammable Explosive Limit:

NA

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## **SECTION 4: Fire And Explosion Hazards**

Flash Point

N.A.

Flash Point Method:

NON-FLAMMABLE

Upper Flammable or Explosive Limit: NA Lower Flammable or Explosive Limit: NA

Extinguishing Media:

Not applicable. Use suitable extinguishing agent for surrounding materials and type of fire. .

Firefighters must wear full face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. Fumes from fire are hazardous. Isolate runoff to prevent environmental pollution. .

Unusual Fire Hazards

May have an explosive reaction with hydrogen + hydrogen peroxide. May have a reaction with formic acid or sodium tetrahydroborate, releasing flammable and explosive hydrogen gas. May have a violent reaction with isopropyl alcohol and OF2S. Under the proper conditions it undergoes hazardous reactions with aluminum; arsenic; carbon; methanol; ozonides and sulfur.

#### **SECTION 5: Health Hazards**

### Palladium metal:

Route of Exposure

Inhalation? Yes, Skin? Yes, Eyes? Yes, Ingestion? Yes, Other: N

Potential Health Effects:

Eye Contact:

May cause abbrasive irritation.

Skin Contact

May cause abbrasive irritation and possibly may be a skin sensitizer.

Inhalation

Inhaltion of dust or powder may cause abbrasive irritation to the respiratory system.

Ingestion:

Poorly absorbed by the body when ingested.

Chronic Eye Contact:a

No chronic health effects recorded.

Chronic Skin Contact:

No chronic health effects recorded.

Chronic Inhalation:

May induce lung malfunction and produce abnormal fetuses.

Chronic Ingestion:

No chronic health effects recorded.

Carcinogenicity:

NTP? No , IARC Monographs? No , OSHA Regulated? No

Target Organs

No target organs recorded. .

Signs/Symptoms

INHALATION: May cause a red, dry, throat and coughing. INGESTION: No acute or chronic health effects recorded. SKIN: May cause redness and itching. EYE: May cause redness, itching and watering.

Other Potential Health Effects:

CARCINOGENICITY/OTHER INFORMATION: No data available.

Aggravation of Pre-Existing Conditions:

Pre-existing respiratory disorders. .

See "Section II" LD 50/LC 50: No toxicity data recorded

#### SECTION 6: Emergency And First Aid Procedures

Physical Health Hazard:

HEALTH HAZARDS (ACUTE AND CHRONIC): To the best of our knowledge the chemical, physical and toxicological properties of palladium metal have not been thoroughly investigated and recorded. Palladium metal: May be a skin sensitizer. In the laboratory, palladium appears to bind to many cell components; blocks the action of a number of enzymes and interferes with use of energy by nerves and muscles; induces lung malfunction and produces abnormal fetuses. Lethal intravenous doses cause appetite loss, hemolysis, renal deposition and bone marrow damage. (Sax, Dangerous Properties of Industrial Materials, eighth edition)

Eve Contact

Flush eyes with lukewarm water, lifting upper and lower eyelids, for at least 15 minutes. Seek medical attention if symptoms persist. .

Skin Contact

Remove contaminated clothing; brush material off skin; wash affected area with mild soap and water; seek medical attention if symptoms persist.

Inhalation:

Remove victim to fresh air; keep warm and quiet; give oxygen if breathing is difficult and seek medical attention if symptoms persist.

Ingestion:

Not applicable.

Note to Physicians

No data available.

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#### SECTION 7 : Reactivity Data

Chemical Stability:

Unstable [] Stable [X]

Conditions to Avoid:

CONDITIONS TO AVOID - INSTABILITY: None .; CONDITIONS TO AVOID - HAZARDOUS POLYMERIZATION: None .

Incompatibilities with Other Materials:

Hydrogen, flammable gases and organic liquids .

Hazardous Polymerization:

#### Will occur [] Will not occur [X]

Hazardous Decomposition Products:

Hydrogen gas .



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#### **SECTION 8: Precautions For Safe Handling**

## Spill Cleanup Measures:

Wear appropriate respiratory and protective equipment specified in section VIII-control measures. 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 proper disposal. Take care not to raise dust.

Other Precautions:

None

#### HAZARD LABEL INFORMATION:

Store in cool, dry area Store in tightly sealed container Wash thoroughly after handling

Handling:

None.

Storage:

No data available.

Hygiene Practices:

WORK/HYGIENIC/MAINTENANCE PRACTICES: Implement engineering and work practice controls to reduce and maintain concentration of exposure at low levels. Use good housekeeping and sanitation practices. 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.

Waste Disposal:

Dispose of in accordance with local, state and federal regulations. .



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#### **SECTION 9: Control Measures**

Ventilation System:

LOCAL EXHAUST: To maintain concentration at low exposure levels SPECIAL: None MECHANICAL (GENERAL): Recommended OTHER: None

Hand Protection Description:

Rubber gloves

Eye/Face Protection:

Safety glasses

Protective Clothing/Body Protection:

Protective gear suitable to prevent contamination

Respiratory Protection:

NIOSH - approved dust-mist-vapor respirator

NIOSH approved respirator Impervious gloves Safety glasses Clothes to prevent skin contact

# Ingredient Guidelines

Ingredient: Palladium metal

Guideline Information:

ACGIH TLV: NE; OSHA PEL: NE; OTHER LIMITS: NE

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SECTION 10 : Other Information

Palladium metal:

Section 302

No

Section 304

No

Section 313 Toxic Release Form:

#### MSDS Revision Date:

06/25/2008

Disclaimer:

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Abbreviations used

NA=Not Applicable NE: Not Established

ADDENDUM: Other Client Information

Notes:

, EJTAGPDCU4A4, EJTAUPD60MM+, KJL81003, EVMAUPDSHT50, EVMAUPDSHT80, EJTAUPD353OD, EJTAUPD57X.3, EVMAUPDSHT.1, EVMAUPDQXQH, EVMAUPDQXQ60, EJTAUPD352A2, EVMAUPDSHOT, EJTCOPDSPL01, EJTPDCOSPL01, EJTFEPD1.5A2, EJTFEPD351A4, EJTINPD353A4, EJTPD2X2A1, EJTPD365A3M\*, EJTPD60X.1MM, EJTPD8X.016, EJTPDAGSPL01, EVMAGPD40+, EJTPDCU352A2, EJTPDNI352A2, EJTNIPD403A+, EJTPDXX1.5A+, EJTPDXX1.5A2, EJTPDXX351A1, EJTPDXX351A2, EJTPDXX

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