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MATERIAL SAFETY DATA SHEET COMPLIES WITH 29 CFR 1910.1200. **OSHA HAZARD COMMUNICATION RULE**

DATE OF LAST REVISION: 03-00

CHEMICAL IDENTITY

LABEL IDENTITY CHEMICAL NAME/SYNONYMS FORMULA CHEMICAL FAMILY CAS REGISTRY NUMBER HAZARDOUS INGREDIENTS +99 - 35 TLV: N/A PALLADIUM ALLOY Pd Metal 7440-05-3 Palladium OSHA/PEL: N/A

PHYSICAL AND CHEMICAL PROPERTIES

COLOR, FORM PHYSICAL FORM VAPOR DENSITY VAPOR PRESSURE @ 20° VOLATILE BY WEIGHT SOLUBILITY IN WATER MELTING POINT SPECIFIC GRAVITY

Silver/gray - Red/brown, Odorless Solid metal Varies NA **Essentially zero** Insoluble 1555° (100% Pd) N/A

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT AUTOIGNITION TEMPERATURE (°C) FLAMMABILITY EXTINGUISHING MEDIA	Non Flammable as a solid NA Non flammable This material is non-combustible. Use appropriate extinguishing agent for surrounding fires. Do not use water to extinguish fires around operations involving molten metal, due to the potential for steam explosion
SPECIAL FIRE FIGHTING PROCEDURES	Self-contained breathing apparatus should be worn when fighting metal dust fires. High levels of dust or fine particles in the air may ignite or explode
UNUSUAL FIRE & EXPLOSION HAZARDS	Platinum can catalyze oxidation and ignition of flammable gases and vapors. Can contain occluded hydrogen.





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HEALTH HAZARD INFORMATION

EMERGENCY OVERVIEW: The alloys as sold in solid form are generally not considered hazardous. However, if the process involves grinding, melting, cutting or any other process that causes a release of dust or fumes, hazardous levels of airborne particulates could be generated.

PRIMARY ROUTES OF ENTRY

INHALATION SKIN CONTACT

CARCINOGENICITY: no NTP: no IARC MONOGRAPHS: no OSHA REGULATE: no

EFFECTS OF OVEREXPOSURE: (acute and chronic) INHALATION: **no specific hazard.** DERMAL/EYE CONTACT: **May cause contact dermatitis** OTHER: **none**

TARGET ORGANS: Respiratory tract; Skin

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Individuals who may have had allergic reactions to metals or sensitivity, may encounter skin rash or dermatitis, if skin contact with this product occurs. Persons with impaired pulmonary functions, may incur further impairment if dust or fumes are inhaled.

EMERGENCY FIRST AID PROCEDURES:

INGESTION: Obtain medical assistance at once.

INHALATION: Breathing difficulty, caused by inhalation of dust or fumes requires removal to fresh air. If breathing has stopped perform artificial respiration and seek medical assistance at once.

SKIN CONTACT: Skin cuts and abrasions can be treated by standard first aid. Skin contamination with dust or powder can be removed with soap and water. If irritation persists obtain medical assistance.

EYE CONTACT: Dust or powder should be flushed from the eyes with running water for 15 minutes. If irritation persists obtain medical assistance.

REACTIVITY DATA

STABILITY CONDITIONS CONTRIBUTING TO UNSTABILITY INCOMPATIBLE MATERIALS TO AVOID

HAZARDOUS DECOMPOSITION PRODUCTS

Stable None known Acetylene, Ammonia and Strong Oxidizers None under proper usage conditions



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HAZARDOUD POLYMERZATION CONDITIONS TO AVOID Will Not Occur Conditions which create dust or fumes.

SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: In solid form this material poses no special clean-up problems. Use normal clean up procedures; wet sweeping or HEPA vacuum, for clean up of dust or powder. Do not use compressed air for cleaning.

WASTE DISPOSAL METHOD: Because of its high intrinsic value this material should be reclaimed. Dispose of in accordance with local, state and federal regulations.

SPECIAL PROTECTIVE INFORMATION

RESPIRATORY PROTECTION	Use an appropriate NIOSH approved respirator if airborne dust concentration exceed the PEL or TLV
LOCAL EXHAUST	Recommended, when cutting, grinding or melting or any other operation where dust or fumes are created.
PROTECTIVE GLOVES	Protective gloves are recommended, to prevent mechanical irritation.
EYE PROTECTION GENERAL	Safety glasses are recommended Recommended
OTHER PROTECTIVE EQUIPMENT	Eye wash fountain should be readily available in areas of use or handling.
EXPOSURE LIMITS	Not established for product as whole.
ENVIRONMENTAL SURVEILLANCE	If the operation generates dust or fumes, exposure to airborne materials should be determined by having air samples taken in the employees breathing zone and work area.

SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE: In solid form this material poses no special problems. Store metal in a dry area. Do not store adjacent to acids.

TRANSPORTATION REQUIREMENTS: No specific D. O. T. requirements.

DOT SHIPPING NAME: TECHNICAL SHIPPING NAME: DOT CLASS: UN NUMBER: Not Regulated Metal Alloy Not Classified None



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PRECAUTIONARY LABELING **OTHER PRECAUTIONS**

NONE NONE

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