

E0229

**Oak Ridge National Laboratory
Oak Ridge, Tennessee 37831**

IBO-MSDS-05678

MATERIAL SAFETY DATA SHEET

The issuance of this document complies with the U. S. Department of Labor, Occupational Safety and Health Administration's (OSHA) Hazard Communication Standard 29 CFR 1910.1200. Standard must be consulted for specific requirements.

Definitions:	ACGIH	American Conference of Governmental Industrial Hygienists	
	NIOSH	National Institute for Occupational Safety and Health	
	NE	Not Established	NISS Not In Sources Searched
	NA	Not Applicable	TLV Threshold Limit Value
	TWA	Time Weighted Average	PEL Permissible Exposure Limit

IDENTITY (As used on label and list): Platinum (-190, -192, -194, -195, -196, -198) Metal Powder

SECTION I. Manufacturer's Identification

Manufacturer's Name:	Emergency Telephone Number:
UT-Battelle	Lab Shift Superintendent (865) 574-6606
c/o Oak Ridge National Laboratory	Telephone Number for Assistance:
Isotope Business Office	Isotope Business Office (865) 574-6984
P. O. Box 2008	Date Prepared: 06-March-1987
Oak Ridge, Tennessee 37831	Date Reviewed: 25-July-2003

SECTION II. Hazardous Ingredients/Identity Information

Exposure Limits:	
OSHA:	TWA 1 mg/m ³
ACGIH TLV:	TWA 1 mg/m ³ (1989-90)
NIOSH:	NE
Immediately Dangerous to Life and Health:	NE
Chemical Formula: Pt	CAS Registry Number: 007440-06-4
	RTECS Number: TP2160000
Health Hazard Rating: 3, high health hazard	DOT Class: 4.1, Flammable Solid
Fire Hazard Rating: 1, slightly flammable	DOT Label: Flammable Solid
Reactivity Rating: 0, nonreactive	DOT Number: UN 3089

SECTION III. Physical/Chemical Characteristics

Physical Description:	Silver-gray, lustrous metal or black powder. Resistant to corrosion.		
Molecular Weight (naturally occurring):	195.09	Vapor Pressure:	NISS
Melting Point:	1773°C	Vapor Density:	NISS
Boiling Point:	3827°C	Percent Volatiles:	NISS
Specific Gravity:	21.45 (water=1)	Solubility:	Insoluble in water.
Evaporation Rate:	NISS		

SECTION IV. Fire and Explosion Hazard Data

Flash Point (method):	NISS	Lower Flammability Limit:	NISS
Autoignition Temperature:	NISS	Upper Flammability Limit:	NISS
Extinguishing Media:	Extinguishing media suitable for surrounding materials.		
Firefighting Procedures:	Firefighting techniques should concentrate on controlling the spread of the fire to other combustible materials. Wear pressure-demand, self-contained breathing apparatus and full firefighting protective clothing.		
Fire and Explosion Hazards:	Flammable in powder form. At extremely high temperatures (3218°F), this metal could melt and continuous heating could produce metal vapor.		

SECTION V. Reactivity Data

Stability:	Unstable: _____	Stable: <u> X </u>
Conditions to Avoid:	NISS	
Incompatibility (materials to avoid):	NISS	
Hazardous Decomposition or Byproducts:	NISS	
Hazardous Polymerization:	May Occur: _____	Will Not Occur: <u> X </u>

SECTION VI. Health Hazard Data

<u>Routes of Entry:</u>	Inhalation: <u>NISS</u>	Skin: <u> </u>	Ingestion: <u> </u>
<u>Signs and Symptoms of Exposure:</u>			
<u>Acute Inhalation:</u>	NISS		
<u>Acute Swallowing:</u>	NISS		
<u>Acute Skin Contact:</u>	Irritant		
<u>Acute Eye Contact:</u>	Irritant		
<u>Chronic:</u>	NISS		
<u>Health Hazards (Target organs/systems):</u>			
<u>Acute:</u>	Blood, central nervous system, digestive system, eyes, lungs, peripheral nervous system, respiratory system, skin (cutaneous hazard).		
<u>Chronic:</u>	NISS		
<u>Emergency and First Aid Procedures:</u>			
<u>Inhalation:</u>	Remove to fresh air. No emergency care anticipated.		
<u>Swallowing:</u>	Induce vomiting only after massive ingestion.		
<u>Skin contact:</u>	Remove contaminated clothing and immediately wash skin with plenty of water.		
<u>Eye contact:</u>	Flush eyes at once with water for at least 15 minutes. Get medical aid.		
<u>Physicians' notes:</u>	NISS		
<u>Carcinogenicity:</u>	NTP <u>NO</u>	IARC Monographs <u>NO</u>	OSHA Regulated <u>NO</u>

Medical Conditions Generally Aggravated by Exposure: NISS

SECTION VII. Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled: Notify safety personnel of leaks or spills. Remove spills by vacuuming or wet sweeping in order to keep airborne dust at a minimum.

Waste Disposal Method: Collect in an appropriate container for salvage or disposal. Treat unsalvageable waste as a toxic solid in accordance with federal, state, and local regulations.

Precautions to be Taken in Handling and Storing: Store in closed container in a cool, dry, well-ventilated, low fire-risk area. Protect container from physical damage.

Other Precautions: Avoid breathing dust. Avoid skin and eye contact. Eyewash stations and washing facilities should be accessible to areas of use.

SECTION VIII. Control Measures

<u>Respiratory Protection (specify type):</u>	Use a NIOSH-approved inorganic dust respirator when dust levels exceed the PEL.
<u>Ventilation:</u>	
<u>Local Exhaust:</u>	Employ to keep dust below the TLV levels.
<u>Mechanical (general):</u>	Employ to keep dust below the TLV levels.
<u>Special:</u>	NISS
<u>Other:</u>	NISS
<u>Protective Gloves:</u>	Compatible chemical resistant gloves.
<u>Eye Protection:</u>	Wear approved chemical safety goggles/glasses.
<u>Other Protective Clothing or Equipment:</u>	Wear protective clothing.
<u>Work/Hygienic Practices:</u>	Wash thoroughly after handling.

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