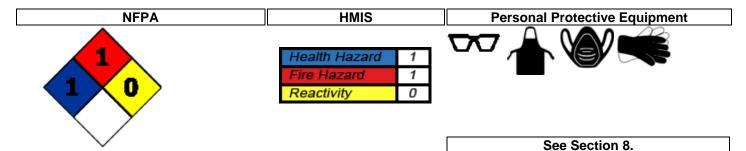




MATERIAL SAFETY DATA SHEET

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1. CHEMICAL PRODUCT AI	ND COMPANY IDENTIFICATION
Product code:	P1930
Product Name:	PLATINUM METAL, 22 MESH, POWDER
Chemical Name:	Platinum
Synonyms:	No information available
Recommended use:	No information available.
CAS #:	7440-06-4
Formula:	Pt
RTECS #	TP2160000
CI#:	Not available
Supplier:	Spectrum Chemicals and Laboratory Products, Inc.
	14422 South San Pedro St.
	Gardena, CA 90248
	(310) 516-8000
Emergency Telephone Number:	CHEMTREC: 1-800-424-9300
Contact Person:	Martin LaBenz (West Coast)
Contact Person:	Chris Terpak (East Coast)

2. HAZARDS IDENTIFICATION

Мау	cause skin and eye irritation. Ma	Y OVERVIEW ay cause irritation of respiratory	v tract.
Odor:	Physical state:	Appearance:	Color:
None	Solid. Metal.	Coarse Powder	Silver-gray

OSHA Regulatory Status

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 1910.1200)

2. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Principal Routes of Exposure: Ingestion. Inhalation.

Acute Potential Health Effects:

Skin Contact:

May cause skin irritation.

Eye Contact:

May cause eye irritation. Mild eye irritation.

Inhalation:

May cause irritation of respiratory tract.

Ingestion:

Expected to be a low hazard. May cause digestive (gastrointestinal) tract irritation. Ingestion may cause vomiting and nausea. May cause central nervous system effects. May affect the liver. It may affect the urinary system. May affect the blood.

Chronic Potential Health Effects:

Target Organs:	Respiratory system. Skin.
Carcinogen Status:	Equivocal tumorigenic agent by RTECS criteria
Mutagenic Effects:	No information available
Teratogenic Effects:	No information available
Aggravated Medical Conditions:	No information available

See Section 11 for additional Toxicological Information

POTENTIAL ENVIRONMENTAL EFFECTS

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Platinum Metal, powder	7440-06-4	100

4. FIRST AID MEASURES

General Advice:	Poison information centres in each State capital city can provide additional assistance for scheduled poisons (13 1126)
Skin Contact:	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops.
Eye Contact:	Flush eye with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.

Inhalation:	Move to fresh air. If breathing is difficult, give oxygen. In case of shortness of breath, give oxygen. Get medical attention.
Ingestion:	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.
Notes to Physician:	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Flammable Properties

Flashpoint (°C/°F):	No information availab	le.
Tested according to: Not applicat	ble	
Lower Explosion Limit (%): Upper Explosion Limit (%):	No information available No information available	
Autoignition Temperature (°C/°F)	No information availab	le
Suitable Extinguishing Media:		Dry sand. Dry sodium chloride. Graphite powder. Met-L-X powder.
Unsuitable Extinguishing Media:		Dry chemical. Water. Foam. Do not use water, CO2, or foam directly on fire itself. Note that the term "Dry Powder" should not be confused with "Dry Chemical" which is normally associated with extinguishing agents suitable for use on flammable liquid fires. Two familiar dry powder extinguishing agents for controlling combustible metal fires are graphite and sodium chloride***
Hazardous Combustion Products	5:	Metal (platinum) oxide fumes***
Specific hazards:		May be combustible at high temperatures. Dousing metallic fires with water may generate hydrogen gas, an extremely dangerous explosion hazard, particularly if fire is in a confined environment***
Special Protective Equipment for	Firefighters:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear
Specific Methods:		No information available.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Remove all sources of ignition.

Environmental Precautions:

No information available..

Methods for Cleaning Up:

Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Clean contaminated surface thoroughly.

Product code: P1930

7. HANDLING AND STORAGE

Handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. All equipment used when handling the product must be grounded. Keep away from incompatible materials.

Safe Handling Advice:

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not ingest. Do not breathe vapours/dust. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Storage

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Products:

Oxidizing agents. Bases. Peroxymonosulfuric acid. Hydrogen + air. Hydrogen peroxide. Lithium. Arsenic. Acetone. Aluminum. Tellurium. Selenium. Phosphorus. Ethanol. Hydrazine. Nitrosyl chloride. Dioxygen difluoride. Ozonides. Acetylene. Vanadium dichloride + water. Carbon + Methanol. Potassium Fluoride + Bromine Trifluoride.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure:

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protective Equipment

Eye protection:	Safety glasses. Safety glasses with side-shields.
Skin and body protection:	Long sleeved clothing. Chemical resistant apron. Gloves.
Respiratory protection:	Wear respirator with dust filter.
Hygiene measures:	Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

National occupational exposure limits

United States

	Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
		0.002 mg/m ³ TWA	1 mg/m³ TWA	1 mg/m³ TWA	Not determined
F	Platinum Metal, powder - 7440-06-4	_	-		

Canada

Components	Alberta	British Columbia	Quebec	Ontario
Platinum Metal, powder 7440-06-4	1 mg/m³ TWA	1 mg/m³ TWA	1 mg/m³ TWAEV	1 TWAEV

Australia and Mexico

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid. Metal.

Odor: None.

Flash point (°C): Not determined

Autoignition Temperature (°C/°F): No information available

Melting point/range(°C/°F): 1769 °C/3216.2 °

Density (g/cm3): No information available

Vapor density: No information available

Odor threshold (ppm): No information available

Solubility:

Insoluble in water Insoluble in organic acids Insoluble in mineral acids Soluble in aqua regia Appearance: Coarse. Powder.

Taste No information available

Lower Explosion Limit (%): No information available

pH: No information available

Decomposition temperature(°C/°F): No information available

Bulk density: No information available

Evaporation rate: No information available

Partition coefficient (n-octanol/water): No information available Color: Silver-gray.

Molecular weight: 195.08

Upper Explosion Limit (%): No information available

Boiling point/range(°C/°F): 3825 °C/6917 °F

Specific gravity: 21.5

Vapor pressure @ 20°C (kPa): < 0

VOC content (g/L): No information available

Miscibility: No information available

10. STABILITY AND REACTIVITY

Stability:	Stable at normal conditions
Conditions to avoid:	Heat. Avoid dust formation. Dust may form explosive mixture in air. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
Materials to avoid:	Oxidising agents. Bases. Tellurium. Selenium. Acetone. Aluminum. Hydrazine. Hydrogen. Hydrogen peroxide. Ethanol. Lithium. Ozonides. Arsenic. dioxygen difluoride. Nitrosyl chloride. Peroxymonosulfuric acid. Phosphorus. Acetylene. Vanadium dichloride + water. Carbon + Methanol. Potassium Fluoride + Bromine Trifluoride.
Hazardous decomposition products:	Metal oxide fumes***
Possibility of Hazardous Reactions:	No information available
Polymerization:	Hazardous polymerisation does not occur
Corrosivity:	No information available

11. TOXICOLOGICAL INFORMATION Acute Toxicity

Component Information

Platinum Metal, powder - 7440-06-4 LD50/oral/rat = No information available LD50/oral/mouse = No information available LD50/dermal/rabbit = Not determined LD50/dermal/rat = No information available LC50/inhalation/rat = No information available LC50/inhalation/mouse = No information available Other LD50 information LD50[Mouse] - Route: Intrapertoneal; Dose: 17 mg/kg

Product Information

LC50/inhalation/rat = No information available LC50/Inhalation/mouse = No information available LD50/dermal/rabbit = No information available LD50/dermal/rat = Not information available LD50/oral/rat = No information available LD50/oral/mouse = No information available

Local Effects

Skin irritation:	May cause skin irritation.
Eye irritation:	Contact with eyes may cause irritation.
Inhalation:	May cause irritation of respiratory tract.
Ingestion:	May cause digestive (gastointestinal) tract irritation. May cause abdominal pain. May cause nausea. May affect liver .
Sensitization:	No information available
Chronic Toxicity	
Chronic Toxicity	Prolonged or repeated ingestion may affect the blood (changes in serum composition). Prolonged or repeated skin contact may cause allergic skin reaction. If allergy develops, very low future exposure can cause itching and skin rash. Prolonged or repeated inhalation may cause Platinosis, an allergic reaction with symptoms similiar to asthma, allergic rhinitis, bronchitis. Symptoms may include eye and nose irritation, shortness, of breath, wheezing, cough, and/or chest tighthess
Carcinogenic effects:	May cause cancer based on animal test data. Equivocal tumorigenic agent by RTECS criteria.
Mutagenic Effects:	No information available
Reproductive Effects:	No information available
Teratogenic Effects:	No information available

12. ECOLOGICAL INFORMATION

ECOTOXICITY

Toxicity to terrestrial and aquatic plants and animals:		No information available
Ecotoxicity effects:	No data available	
Aquatic toxicity:	No information availabl	e
Mobility:	No information availabl	e
Persistence and degradability:	No information availabl	e
Bioaccumulative potential:	No information availabl	е

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Platinum Metal, powder	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No:	Not regulated
Proper Shipping Nam	No information available
Hazard Class:	No information available
Packing Group:	None
Subsidiary Risk:	Not applicable
Marine Pollutant	No data available
ERG No:	No information available
DOT RQ (Ibs):	No information available
TDG (Canada)	
Proper Shipping Nam	e: No information available
UN-No:	Not regulated
Hazard Class:	No information available
Packing Group:	No information available
Subsidiary Risk:	No information available
Description:	No information available
ADR	
Proper Shipping Nam	e: No information available
UN-No:	Not regulated
Hazard Class:	No information available
Packing Group:	No information available
Subsidiary Risk:	No information available
Classification Code:	No information available
Description:	No information available

CEFIC Tremcard No:

IMO / IMDG

Proper Shipping Name:	No information available
UN-No:	Not regulated
Hazard Class:	No information available
Subsidiary Risk:	No information available
Packing Group:	No information available
Description:	No information available
IMDG Page:	No information available
Marine Pollutant	No information available
MFAG:	No information available
Maximum Quantity:	No information available

RID

Proper Shipping Name:	No information available
UN-No:	Not regulated
Hazard Class:	No information available
Packing Group:	No information available
Subsidiary Risk:	No information available
Classification Code:	No information available
Description:	No information available

ICAO

UN-No:	Not regulated
Hazard Class:	No information available
Proper Shipping Name:	No information available
Packing Group:	No information available
Subsidiary Risk:	No information available
Description:	No information available
-	

IATA

Proper Shipping Name:	No information available
UN-No:	Not regulated
Hazard Class:	No information available
Packing Group:	No information available
Subsidiary Risk:	No information available
Description:	No information available

15. REGULATORY INFORMATION

International Inventories

Components	U.S. TSCA	Philippines (PICCS)	KOREA KECL	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Platinum Metal, powder	Present	Present	KE-28808	Not present	Present	Present	231-116-1

U.S. Regulations

Platinum Metal, powder Massachusetts RTK: Present New Jersey RTK Hazard Substance: Present Pennsylvania RTK: Present RI RTK - Hazardous Substances List: Present Minnesota - Hazardous Substance List: Present California Directors List of Hazardous Substances: Present

California Prop. 65: Safe Drinking Water and Toxic Enforcment Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	Carcinogen	Developmental Toxicity	Male Reproductive	Female Reproductive
			Toxicity	Toxicity:
Platinum Metal, powder	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CERCLA - Hazardous	Section 302 Extremely	Section 302 Extremely	Section 313 -	Section 313 - Reporting
	Substances and their	Hazardous	Hazardous	Chemical Category	de minimis
	Reportable Quantities	Substances and TPQs	Substances and RQs		
Platinum Metal, powder	None	None	None	None	None

U.S. TSCA

	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Platinum Metal, powder	Not Applicable	Not Applicable

Canada

WHMIS hazard class:

Non-controlled

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Components	WHMIS Ingredient Disclosure List -
Platinum Metal, powder	1 %

Inventory

Components		Canada (NDSL)
Platinum Metal, powder	Present	Not Listed

EU Classification

R -phrase(s) not determined

S -phrase(s)

none

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger: Not dangerous

16. OTHER INFORMATION

The MSDS format complies with ANSI Z400.1-2004 standards.

Preparation Date	21-Oct-2010
Reason for revision:	Not applicable
Prepared by:	Sonia Owen
Literature reference:	No information available

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. The physical properties reported in this MSDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.