

## SAFETY DATA SHEET

Preparation Date: 09/03/2015

Revision Date: 09/03/2015

Revision Number: G1

### 1. IDENTIFICATION

**Product identifier**

**Product code:** P1148  
**Product Name:** PLATINUM BLACK, POWDER

**Other means of identification**

**Synonyms:** Platinum sponge  
**CAS #:** 7440-06-4  
**RTECS #** TP2160000  
**CI#:** Not available

**Recommended use of the chemical and restrictions on use**

**Recommended use:** Catalyst.  
**Uses advised against** No information available

**Supplier:** Spectrum Chemical Mfg. Corp  
 14422 South San Pedro St.  
 Gardena, CA 90248  
 (310) 516-8000

**Order Online At:** <https://www.spectrumchemical.com>

**Emergency telephone number** Chemtrec 1-800-424-9300  
**Contact Person:** Martin LaBenz (West Coast)  
**Contact Person:** Ibad Tirmiz (East Coast)

### 2. HAZARDS IDENTIFICATION

**Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable solids	Category 2
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**Label elements**

**Warning**

Flammable solids

**Hazards not otherwise classified (HNOC)**

Not Applicable

**Other hazards**

Not available

**Precautionary Statements - Prevention**

Keep away from heat/sparks/open flames/hot surfaces. — No smoking  
 Ground/bond container and receiving equipment  
 Use explosion-proof electrical/ventilating/lighting/./? /equipment  
 Wear protective gloves/protective clothing/eye protection/face protection

In case of fire: Use CO2, dry chemical, or foam to extinguish.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %	Trade Secret
Platinum Black 7440-06-4	7440-06-4	100	*

### 4. FIRST AID MEASURES

**First aid measures****General Advice:**

Poison information centers 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 skin irritation persists, call a physician.

**Eye Contact:**

Flush eye with water for 15 minutes. Get medical attention.

**Inhalation:**

Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Ingestion:**

Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

**Most important symptoms and effects, both acute and delayed****Symptoms**

May cause skin irritation. May cause eye irritation.

**Indication of any immediate medical attention and special treatment needed****Notes to Physician:**

Treat symptomatically

### **Protection of first-aiders**

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

## **5. FIRE-FIGHTING MEASURES**

### **Extinguishing Media**

#### **Suitable Extinguishing Media:**

Dry sand. Dry sodium chloride. Graphite powder. Dry powder.

#### **Unsuitable Extinguishing Media:**

Dry chemical. Water. Foam. CO2. 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.

### **Specific hazards arising from the chemical**

#### **Hazardous Combustion Products:**

Metal (platinum) oxides

#### **Specific hazards:**

Flammable  
May be ignited by heat, sparks or flames  
Container explosion may occur under fire conditions or when heated  
Dousing metallic fires with water may generate hydrogen gas, an extremely dangerous explosion hazard, particularly if fire is in a confined environment  
Some dry chemicals may create an explosive reaction when applied to combustible metal fires.

### **Special Protective Actions for Firefighters**

#### **Specific Methods:**

No information available.

#### **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

## **6. ACCIDENTAL RELEASE MEASURES**

### **Personal precautions, protective equipment and emergency procedures**

#### **Personal Precautions:**

Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid breathing dust. Avoid dust formation. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

#### **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### **Methods and material for containment and cleaning up**

#### **Methods for containment**

Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

#### **Methods for cleaning up**

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

## 7. HANDLING AND STORAGE

### Precautions for safe handling

#### **Technical Measures/Precautions:**

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

#### **Safe Handling Advice**

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

### Conditions for safe storage, including any incompatibilities

#### **Technical Measures/Storage Conditions:**

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

#### **Incompatible Materials:**

Oxidizing agents. Bases. Halogens. Cyanides. Sulfur. Aluminum. Acetone. Arsenic. Carbon + Methanol. Nitrosyl chloride. Dioxygen difluoride. Ethanol. Hydrazine. Hydrogen + air. Hydrogen peroxide. Lithium. Methyl hydroperoxide. Ozonides. Peroxymonosulfuric acid. Phosphorus. Selenium. Tellurium. Vanadium dichloride + water.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### **National occupational exposure limits**

##### **United States**

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
Platinum Black 7440-06-4	0.002 mg/m <sup>3</sup> TWA	1 mg/m <sup>3</sup> TWA	1 mg/m <sup>3</sup> TWA	None

##### **Canada**

Components	Alberta	British Columbia	Ontario	Quebec
Platinum Black 7440-06-4	1 mg/m <sup>3</sup> TWA EV			

##### **Australia and Mexico**

Components	Australia	Mexico
Platinum Black 7440-06-4	1 mg/m <sup>3</sup> TWA	None

### Appropriate engineering controls

#### **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.

### Individual protection measures, such as personal protective equipment

#### **Personal Protective Equipment**

**Eye protection:** 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 at the end of workday. When using, do not eat, drink or smoke.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:**  
Solid. Metal.

**Appearance:**  
Powder.

**Color:**  
Black.

**Odor:**  
None.

**Taste**  
No information available

**Molecular/Formula weight:**  
195.08

**Formula:**  
Pt

**Flammability:**  
No information available

**Flash point (°C):**  
No data available

**Flashpoint (°C/°F):**  
No information available.

**Flash Point Tested according to:**  
Not available

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

**Lower Explosion Limit (%):**  
No information available

**Upper Explosion Limit (%):**  
No information available

**pH:**  
No information available

**Melting point/range(°C/°F):**  
1769 - 1773 °C/3216.2 - 3223.4 °F

**Boiling point/range(°C/°F):**  
3825 - 3827 °C/6917 - 6920.6 °F

**Bulk density:**  
No information available

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

**Density (g/cm<sup>3</sup>):**  
No information available

**Specific gravity:**  
21.5

**Vapor pressure @ 20°C (kPa):**  
No information available

**Evaporation rate:**  
No information available

**Vapor density:**  
No information available

**VOC content (g/L):**  
No information available

**Odor threshold (ppm):**  
No information available

**Partition coefficient (n-octanol/water):**  
No information available

**Viscosity:**  
No information available

**Miscibility:**  
No information available

**Solubility:**  
Insoluble in water  
Insoluble in mineral acids  
Insoluble in organic acids  
Soluble in aqua regia

## 10. STABILITY AND REACTIVITY

### Reactivity

Reactive with oxidizing agents, bases, halogens, cyanides, sulfur, aluminum, acetone, arsenic, carbon + methanol, nitrosyl chloride, dioxygen difluoride, ethanol, hydrazine, hydrogen + air, hydrogen peroxide, lithium, methyl hydroperoxide, ozonides, peroxymonosulfuric acid, phosphorus, selenium, tellurium, vanadium dichloride + water

### Chemical stability

**Stability:** Stable under recommended storage conditions

**Possibility of Hazardous Reactions:** Hazardous polymerization does not occur

**Conditions to avoid:** Heat. Ignition sources. Avoid dust formation. Risk of dust explosion. Material in powder form, capable of creating a dust explosion..

**Incompatible Materials:** Oxidizing agents. Bases. Halogens. Cyanides. Sulfur. Aluminum. Acetone. Arsenic. Carbon + Methanol. Nitrosyl chloride. Dioxygen difluoride. Ethanol. Hydrazine. Hydrogen + air. Hydrogen peroxide. Lithium. Methyl hydroperoxide. Ozonides. Peroxymonosulfuric acid. Phosphorus. Selenium. Tellurium. Vanadium dichloride + water.

**Hazardous decomposition products:** Metal oxide fumes.

**Other Information**  
**Corrosivity:** No information available

**Special Remarks on Corrosivity:** No information available

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

**Principal Routes of Exposure:**  
Inhalation. Ingestion. Skin.

### Acute Toxicity

### Component Information

*Platinum Black - 7440-06-4*

**LD50/oral/rat** = No information available  
**LD50/oral/mouse** = No information available  
**LD50/dermal/rat** = No information available  
**LD50/dermal/rabbit** = No information available  
**LC50/inhalation/rat** = No information available  
**LC50/inhalation/mouse** = No information available  
**Other LD50 or LC50 information** = No information available

### Product Information

**LD50/oral/rat** =  
**VALUE- Acute Tox Oral** = No information available

**LD50/oral/mouse** =  
**Value - Acute Tox Oral** = No information available

**LD50/dermal/rabbit**  
**VALUE-Acute Tox Dermal** = No information available

**LD50/dermal/rat**  
**VALUE -Acute Tox Dermal** = No information available

**LC50/inhalation/rat**  
**VALUE-Vapor** = No information available  
**VALUE-Gas** = No information available  
**VALUE-Dust/Mist** = No information available

**LC50/Inhalation/mouse**  
**VALUE-Vapor** = No information available  
**VALUE - Gas** = No information available

VALUE - Dust/Mist = No information available

**Symptoms**

**Skin Contact:** May cause skin irritation. May cause allergic skin reaction.

**Eye Contact:** May cause eye irritation.

**Inhalation** May cause respiratory tract irritation.  
**Ingestion** May cause digestive (gastrointestinal) tract irritation.

**Aspiration hazard** No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Chronic Toxicity** Prolonged or repeated inhalation may cause Platinosis, an allergic reaction with symptoms similar to asthma, allergic rhinitis, bronchitis. Symptoms may include eye and nose irritation, shortness of breath, wheezing, cough, and/or chest tightness. Prolonged or repeated inhalation may cause allergic rhinitis, bronchitis. Symptoms may include eye and nose irritation, shortness of breath, wheezing, cough, and/or chest tightness. Prolonged or repeated skin contact may cause allergic skin reaction. If allergy develops, very low future exposure can cause itching and skin rash. Repeated or prolonged ingestion may affect the blood.

**Sensitization:** May cause sensitization by inhalation and skin contact

**Mutagenic Effects:** No information available

**Carcinogenic effects:** May cause cancer based on animal test data. Equivocal tumorigenic agent by RTECS criteria.

Components	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Prohibited Carcinogenic Substances	Australia - Notifiable Carcinogenic Substances
Platinum Black	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

**Reproductive toxicity** No data is available

**Reproductive Effects:** No information available  
**Developmental Effects:** No information available  
**Teratogenic Effects:** No information available

**Specific Target Organ Toxicity**

**STOT - single exposure** No information available  
**STOT - repeated exposure** No information available  
**Target Organs:** No information available

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Ecotoxicity effects:** No data available.

**Persistence and degradability:** No information available

**Bioaccumulative potential:** No information available

**Mobility:** No information available

### 13. DISPOSAL CONSIDERATIONS

#### Disposal Methods

**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 Black	None	None	None	None

### 14. TRANSPORT INFORMATION

**DOT**

**UN-No:** UN3089  
**Proper Shipping Name:** Metal powders, flammable, n.o.s.  
**Hazard Class:** 4.1  
**Subsidiary Risk:** No information available  
**Packing Group:** III  
**ERG No:** 170  
**Marine Pollutant:** No data available  
**DOT RQ (lbs):** No information available

**TDG (Canada)**

**UN-No:** UN3089  
**Proper Shipping Name:** Metal powder, flammable, n.o.s.  
**Hazard Class:** 4.1  
**Subsidiary Risk:** No information available  
**Packing Group:** III  
**Description:** No information available

**ADR**

**UN-No:** UN3089  
**Proper Shipping Name:** Metal powder, flammable, n.o.s.  
**Hazard Class:** 4.1  
**Packing Group:** III  
**Subsidiary Risk:** No information available  
**Classification Code:** No information available  
**Description:** No information available  
**CEFIC Tremcard No:** No information available

**IMO / IMDG**

**UN-No:** UN3089  
**Proper Shipping Name:** Metal powder, flammable, n.o.s.  
**Hazard Class:** 4.1

## 14. TRANSPORT INFORMATION

**Subsidiary Risk:** No information available  
**Packing Group:** III  
**Description:** No information available  
**IMDG Page:** No information available  
**Marine Pollutant:** No information available  
**EMS:** F-G  
**MFAG:** No information available  
**Maximum Quantity:** No information available

### RID

**UN-No:** UN3089  
**Proper Shipping Name:** Metal powder, flammable, n.o.s.  
**Hazard Class:** 4.1  
**Subsidiary Risk:** 4.1  
**Packing Group:** III  
**Classification Code:** No information available  
**Description:** No information available

### ICAO

**UN-No:** Metal Powder, flammable, n.o.s (Platinum, powder)UN3089  
**Proper Shipping Name:** Metal powder, flammable, n.o.s.  
**Hazard Class:** 4.1  
**Subsidiary Risk:** No information available  
**Packing Group:** III  
**Description:** No information available

### IATA

**UN-No:** UN3089  
**Proper Shipping Name:** Metal powder, flammable, n.o.s.  
**Hazard Class:** 4.1  
**Subsidiary Risk:** No information available  
**Packing Group:** III  
**ERG Code:** 3L  
**Description:** No information available

## 15. REGULATORY INFORMATION

### International Inventories

Components	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
<i>Platinum Black</i>	Present	Present KE-28808	Present	Not present	Present	Present	Present 231-116-1

### U.S. Regulations

#### *Platinum Black*

**Massachusetts RTK:** Present  
**New Jersey RTK Hazardous Substance List:** 1547  
**Pennsylvania RTK:** Present  
**Minnesota - Hazardous Substance List:** Present  
**California Directors List of Hazardous Substances:** Present

#### California Prop. 65: Safe Drinking Water and Toxic Enforcement 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 Toxicity	Female Reproductive Toxicity:
Platinum Black	Not Listed	Not Listed	Not Listed	Not Listed

**CERCLA/SARA**

Components	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting <i>de minimis</i>
Platinum Black	None	None	None	None	None

**U.S. TSCA**

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

**Canada****WHMIS hazard class:**

B4 Flammable solid

**Platinum Black**

Uncontrolled product according to WHMIS classification criteria (for Platinum as non-powder)  
B4 - Flammable Solid (powder)

**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 Black	1 %

**Inventory**

Components	Canada (DSL)	Canada (NDSL)
Platinum Black	Present	Not Listed

Components	CEPA Schedule I - Toxic Substances	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Platinum Black	Not listed	Not listed

**EU Classification****R-phrases)**

R11 - Highly flammable.

**S -phrase(s)**

S 7 - Keep container tightly closed.

S33 - Take precautionary measures against static discharges.

S43 - In case of fire use DRY sand, Graphite powder, or DRY Sodium Chloride based extinguishers. Never use water, foam or CO2

Components	Classification	Concentration Limits:	Safety Phrases
Platinum Black		No information	

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

**Indication of danger:**

F - Highly flammable.

F

**16. OTHER INFORMATION**

## 16. OTHER INFORMATION

**Preparation Date:** 09/03/2015  
**Revision Date:** 09/03/2015  
**Prepared by:** Sonia Owen

**Disclaimer:**

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) 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 SDS. The physical properties reported in this SDS 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 SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

**End of Safety Data Sheet**