

Safety Data Sheet

29 CFR 1910.1200

Section 1: Company and Product Identification

Product Name: Platinum (IV) Oxide

Product Code: 6007

Company: Colonial Metals, Inc.
 Building 20
 505 Blue Ball Road
 Elkton, MD 21921 United States
 Company Contact: EHS Director
 Telephone Number: 410-398-7200
 FAX Number: 410-398-2918
 E-Mail : info@colonialmetals.com
 Web Site: www.colonialmetals.com



www.colonialmetals.com

Emergency Response: Supplier Emergency Contacts & Phone Number
 Chemtrec: 800-424-9300
 World Wide - Call COLLECT to U.S: 703-527-3887

Section 2: Hazards Identification

Hazard Pictograms:



Signal Word: Warning

Hazard Category: Flammable Solid
 Skin corrosion/irritation Cat 2
 Serious eye damage/eye irritation Cat 2
 Aspiration hazard Cat 2

Hazard Statements: H228: Flammable solid
 H315: Causes skin irritation
 H319: Causes serious eye irritation
 H305: May be harmful if swallowed and enters airways

Precautionary Statements: P202: Do not handle until all safety precautions have been read and understood
 P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking
 P241: Use explosion-proof electrical/ventilating/light/.../equipment
 P264: Wash thoroughly after handling
 P280: Wear protective gloves/protective clothing/eye protection/face protection
 P302+334: IF ON SKIN: Immerse in cool water/wrap in wet bandages
 P405: Store locked up
 P501: Dispose of contents/container in accordance with local/national/international rules.
 P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing

Hazards not otherwise classified: **Conditions Aggravated By Exposure:** Any respiratory conditions such as asthma. Maintain housekeeping and personal hygiene to minimize exposure and prevent sensitization.

Section 3: Composition / Information on Ingredients

Hazardous substance (name)	Hazard Category	CAS#	Weight %
Platinum (IV) Oxide	This product is considered non-hazardous when evaluated by criteria established in the OSHA Hazard Communication Standard (29 CFR 1910.1200).	1314-15-4	99 – 100
Product Name: Platinum (IV) Oxide Chemical Name: Adams catalyst Chemical Family: Platinum Group Metals Chemical Formula: PtO ₂ Synonyms: Adams catalyst			

Section 4: First Aid Measures

General Info: Ensure proper ventilation.

Notable Exposure symptoms: Irritation to skin, eyes and areas of contact.

If ingested: Rinse mouth. Seek immediate medical attention. Clear the airway and administer artificial respiration if not breathing.

If swallowed, do not induce vomiting unless directed to do so by medical personnel.

If inhaled: Remove the victim from the contaminated area while protecting yourself from exposure by wearing an appropriate respirator. Put a similar respirator on the victim if possible. Get medical attention immediately.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. Get medical attention.

Skin contact: Take off immediately all contaminated clothing. Rinse with water thoroughly. Get medical advice if irritation develops or persists.

Additional Info: Observe for any symptoms for several hours after exposure. Follow up with medical attention if symptoms develop.

Section 5: 5. Fire Fighting Measures

General Info: Finely divided platinum may ignite if contacted with flammable organic solvents. Powders may be subjected to self-heating if hydrogen or carbon monoxide are occluded.

Extinguishing Method / Equipment: Water spray, foam, dry chemical or carbon dioxide

Hazardous Decomposition Info: If this product is involved in a fire, the following can be released: Metal oxide Fume, Carbon Oxides

Section 6: 6. Accidental Release Measures

Personal precautions, protective equipment and procedures: Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing dust. Ventilate area if easy to do so. Contact local authorities if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Containment Procedures: Large Spills: Contain actively spilling material if safe and easy to do so, avoid generating dust.

Equipment and Procedures: Collect material and dispose. Ventilate area and wash spill site after pick up is complete.

Small Spills: Soak up with a wet paper towel or rag and place in a sealed container.

Cleanup Procedures: Collect all contaminated media, or other cleanup materials into a waste receptacle. If cleaning surface is necessary, utilize vacuum cleaner, provided adequate ventilation is available.

Section 7: Handling and Storage

Safe Handling Precautions: Do not handle until all safety precautions have been read and understood. Keep containers tightly closed. Ensure adequate ventilation. Avoid breathing dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment and wash thoroughly after handling. Protect against electrostatic charges.

Recommendations for Storage: Store in cool, dry area in a tightly closed product container away from sources of ignition or flame and combustible material.

Incompatibilities: Store away from strong acids or combustible materials. Refer to Section 10.

Section 8: Exposure Control / Personal Protection

General / Engineering Use with properly operating chemical fume hood designed for hazardous chemicals with adequate
Controls: local and general exhaust ventilation.

Work Clothing: Protective work clothing which covers skin and prevents exposures.

Eye/face protection: Wear safety glasses with side shields or goggles or face shield.

Skin Protection: Wear chemical resistant gloves.

Respiratory Protection: Utilize organic vapor respirator if airborne levels are not maintained or if ventilation is inadequate.

Additional Information: The usual precautionary measure for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Maintain an ergonomically appropriate working environment

Section 9: Physical and Chemical Properties

State: Solid	Melting Point: 842 °F Decomposes 450 °C	Specific Gravity: 10
Color: Brown Powder	Boiling Point/Range: N/A	pH N/A
Molecular Wt. 227.09	Odor: N/A	Water Solubility: Insoluble
Evaporation rate: N/A	Flash Point: N/A	Part. Coeff (n-octanol/water): N/A
Upper Flam Limits: N/A	Lower Flam Limits: N/A	Vapor Pressure: N/A
VOC Content (lbs/gal): N/A	Viscosity: N/A	Autoignition Temp: N/A

Section 10: Stability and Reactivity

General: This product is stable and non-reactive under normal conditions of use. Product is not subject to hazardous polymerization. Avoid open flame and ignition sources.

Conditions To Avoid (Stability): Temp. above 300°C

Incompatible materials: Organic materials and powdered metals

Decomposition products: Metal Oxide Fume. Carbon Oxides

Section 11: Toxicological Information

General Information: No data available

Toxicological Information (product): Acute Studies
Oral
Rat
>8000 mg/kg
LD50

Likely Routes of Exposure: Eye Contact
Skin Contact
Inhalation
Ingestion - possible, but considered unlikely.

Toxicological Information (contained substances)

Carcinogenicity or mutagenicity: No data available

Sensitization: Platinum salts, especially ionic platinum halogeno complexes, may cause severe allergic reactions.

Other Notes: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

Section 12: Ecological Information

General information: Product not tested.

Aquatic toxicity: No specific data available. Do not allow large quantities of product to reach water, ground water, water courses or sewer systems.

Degradation / Mobility info: No specific data available.

Bioaccumulative potential: No specific data available.

Section 13: Disposal Information

Product disposal: Dispose of product in accordance with local, regional, and national regulations. Burn in an incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Consult with a licensed professional waste contractor to dispose of this material.

Container disposal: Treat empty containers with extra care. Consult waste contractor.

Other considerations: Chemical additions, processing, or otherwise altering this material may make the waste management information presented above incomplete, inaccurate, or otherwise inappropriate.

Section 14: Transport Information

DOT: Proper Shipping Name:

Oxidizing solid, n.o.s. (Platinum dioxide)

Hazard Class:

5.1

DOT Identification Number:

1479

Packaging Requirements:

PG II

IMO/IMDG: Inquire for further transport information.

IATA: Same as DOT regulations. Consult IATA regulations before shipping

OTHER: Inquire for further transport information.

Comments: None

Section 15: Regulatory Information

TSCA: All ingredients of this product are listed under the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

SARA 313 Substance not listed. This product does not contain any ingredients regulated under Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 or 40 CFR 372

State Regulations: California Proposition 65 - Substance is not listed

Canadian DSL: This product has been classified in accordance with the hazard criteria of CPR, and the MSDS contains all the information required by the CPR

European Union (EU) Regulatory Information: **Indication of Danger:** Irritant
Symbol of Danger: Xi

R: 20, 38

Risk Phrase: Harmful by inhalation. Irritating to the skin.

S: 24/25, 36/37/39

Safety Phrase: Avoid contact with skin and eyes. Wear suitable protective clothing, gloves, and eye face protection.

Section 16: Other Information

Health: 2
Fire: 0
Reactivity: 2

HMIS Rating

Health: 2
Fire: 0
Reactivity: 2
Personal Protection: J

Disclaimer: *In compliance with the OSHA Hazard communication Standard, 2.9 C.F.R 1910.1200, we are providing you with a Materials Safety Data Sheet (MSDS) for the hazardous material you are purchasing.*

It is your responsibility to educate your employees on the safe use of the hazardous material. With this in mind, a copy should be forwarded to the supervisor of the user or to the user themselves, and copy should be retained in your files for future reference.

Colonial Metals, Inc. makes no presentation as to the accuracy of the information in the MSDS. The information is believe to be correct; however, you (the customer), should preform your own investigation and independent verification. If you resell the product, you are responsible to forward the information in the MSDS to your customer.

Colonial Metals, Inc.

SDS Author: John Kerchner

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