

MATERIAL SAFETY DATA SHEET (MSDS)

PLATINUM OXIDE (HYDRATED) (APP. 80%)(ADAM'S CATALYST)

1. Product Identification

Synonyms: None **CAS No.:** 52785-06-5

Product Coad: P0162400005

Molecular Weight: 227.09 Chemical Formula: PtO2.xH2O

2. Composition/Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
52785-06-5	Platinum (IV) Oxide	ca 100	215-223-0

3. Hazards Identification

EMERGENCY OVERVIEW

Appearance: black solid.

Danger! Corrosive to steel and aluminum. Strong oxidizer. Contact with other material may cause a fire. Causes severe eye irritation and possible eye injury. Causes skin irritation. May cause respiratory tract irritation. The toxicological properties of this material have not been fully investigated. Target Organs: Eyes, skin.

Potential Health Effects

Eye: May cause conjunctivitis. May cause permanent corneal opacification. Causes eye irritation and possible injury.

Skin: Causes skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. The toxicological properties of this substance have not been fully investigated. May be harmful if swallowed.

Inhalation: May cause respiratory tract irritation. May cause asthmatic attacks due to allergic sensitization of the respiratory tract. The toxicological properties of this substance have not been fully investigated.

Chronic: Effects may be delayed.

4. First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid imme diately. Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water. Wash mouth out with water.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

5. Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water with caution and in flooding amounts. Oxidizer. Greatly increases the burning rate of combustible materials. Some oxidizers may react explosively with hydrocarbons(fuel). May accelerate burning if involved in a fire. Containers may explode when heated.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam. Contact professional fire-fighters immediately.

Flash Point: Not applicable.

Autoignition Temperature: Not applicable.

Explosion Limits, Lower: Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 3; Flammability: 1; Instability: 1; Special Hazard: OX

6. Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Remove all sources of ignition. Do not use combustible materials such as paper towels to clean up spill.



MATERIAL SAFETY DATA SHEET (MSDS)

PLATINUM OXIDE (HYDRATED) (APP. 80%)(ADAM'S CATALYST)

7. Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid breathing dust, mist, or vapor. Avoid contact with clothing and other combustible materials. Do not get on skin or in eyes. Avoid ingestion and inhalation. Storage: Keep away from heat, sparks, and flame. Do not store near combustible materials. Store in a cool, dry place. Store in a tightly closed container.

8. Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low. Exposure Limits

Exposure Emilio

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Platinum (IV) Oxide	none listed	none listed	none listed

OSHA Vacated PELs: Platinum (IV) Oxide: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

9. Physical and Chemical Properties

Physical State: Solid Appearance: black Odor: Not available. pH: Not available. Vapor Pressure: Negligible

Vapor Density: Not available.
Evaporation Rate:Not available.
Viscosity: Not available.
Boiling Point: Not available.
Freezing/Melting Point:450 deg C

Decomposition Temperature:Not available. Solubility: Insoluble in water.

Specific Gravity/Density:Not available.

Molecular Formula:PtO2 Molecular Weight:227.0788

10. Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials, ignition sources, dust generation, combustible materials, reducing agents.

Incompatibilities with Other Materials: Reducing agents, steel, aluminum.

Hazardous Decomposition Products: No data available.

Hazardous Polymerization: Will not occur.

11. Toxicological Information

RTECS#:

CAS# 52785-06-5unlisted.

LD50/LC50:

Not available

Carcinogenicity:

CAS# 52785-06-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information found



MATERIAL SAFETY DATA SHEET (MSDS)

PLATINUM OXIDE (HYDRATED) (APP. 80%)(ADAM'S CATALYST)

Teratogenicity: No information found

Reproductive Effects: No information found Mutagenicity: No information found Neurotoxicity: No information found

Other Studies:

12. Ecological Information

No information available.

13. Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed. RCRA U-Series: None listed.

14. Transport Information

	US DOT	Canada TDG
Shipping Name:	DOT regulated - small quantity provisions apply (see 49CFR173.4)	OXIDIZING SOLID, CORROSIVE, N.O.S. (PLATINUM OXIDE)
Hazard Class:		5.1
UN Number:		UN3085
Packing Group:		II

15. Regulatory Information

US FEDERAL

TSCA

CAS# 52785-06-5is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances None of the chemicals in this product have a TPQ

Section 313 No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 52785-06-5is not present on state lists from CA, PA, MN, MA, FL, or NJ.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

XI O

Risk Phrases:



MATERIAL SAFETY DATA SHEET (MSDS)

PLATINUM OXIDE (HYDRATED) (APP. 80%)(ADAM'S CATALYST)

R 38 Irritating to skin.

R 41 Risk of serious damage to eyes.

R 8 Contact with combustible material may cause fire.

Safety Phrases:

S 17 Keep away from combustible material.

S 22 Do not breathe dust.

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection

S 28A After contact with skin, wash immediately with plenty of water

WGK (Water Danger/Protection)

CAS# 52785-06-5: No information available.

Canada - DSL/NDSL

CAS# 1314-15-4 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of D2B, E, C.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

16. Other Information

Product Use: Laboratory Reagent.

In accordance with REACH Regulation (CE) No 1907/2006 and with CLP Regulation (CE) No 1272/2008

DISCLAIMER:

- SUVCHEM Products are to be used as Lab Chemicals for R&D only. Not for drug, medicinal, household or other uses.
- SUVCHEM shall not be responsible for any damage resulting from handling or from contact with the above product.
- SUVCHEM provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product.

End of document