

Material Safety Data Sheet

Palladium Black, 98% Pd

ACC# 95040

Section 1 - Chemical Product and Company Identification

MSDS Name: Palladium Black, 98% Pd

Catalog Numbers: AC195020250, AC195150010, AC195150050, AC9492574

Synonyms: Palladium Black

Company Identification:

Acros Organics N.V.

One Reagent Lane

Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01

For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
7440-05-3	Palladium	98	231-115-6

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: black solid.

Caution! May cause allergic skin reaction. May cause eye, skin, and respiratory tract irritation.

Target Organs: Liver, lungs, skin.

Potential Health Effects

Eye: May cause eye irritation.

Skin: May cause 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.

Inhalation: May cause respiratory tract irritation.

Chronic: Chronic exposure may lead to liver and lung damage.

Section 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.

Skin: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

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 if cough or other symptoms appear.

Notes to Physician: Treat symptomatically and supportively.

Section 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. Dusts at sufficient concentrations can form explosive mixtures with air.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam. Use agent most appropriate to extinguish fire.

Flash Point: Not available.

Autoignition Temperature: Not available.

Explosion Limits, Lower:N/A

Upper: N/A

NFPA Rating: Not published.

Section 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. Very fine particles can cause a fire or explosion. Eliminate all ignition sources. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Wash hands before eating. Use only in a well-ventilated area. Minimize dust generation and accumulation. Avoid breathing dust, vapor, mist, or gas. Do not get on skin or in eyes. Avoid ingestion and inhalation.

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Palladium	none listed	none listed	none listed

OSHA Vacated PELs: Palladium: 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.

Section 9 - Physical and Chemical Properties

Physical State: Solid

Appearance: black

Odor: Odorless.

pH: Not available.

Vapor Pressure: Not available.

Vapor Density: Not available.

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: 2970 deg C @ 760.00mm Hg

Freezing/Melting Point: 1555 deg C

Decomposition Temperature: Not available.

Solubility: slightly soluble in hydrochloric acid

Specific Gravity/Density: 12.02 g/cm³

Molecular Formula: Pd

Molecular Weight: 106.40

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

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

Incompatibilities with Other Materials: Arsenic, ozone, sodium tetrahydroborate, sulfur.

Hazardous Decomposition Products: Irritating and toxic fumes and gases, hydrogen gas.

Hazardous Polymerization: Not available.

Section 11 - Toxicological Information

RTECS#:

CAS# 7440-05-3; RT3480500; RT3593400

LD50/LC50:

Not available.

Carcinogenicity:

CAS# 7440-05-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information available.

Teratogenicity: No information available.

Reproductive Effects: No information available.

Mutagenicity: No information available.

Neurotoxicity: No information available.

Other Studies:

Section 12 - Ecological Information

No information available.

Section 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.

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	PYROPHORIC SOLID, INORGANIC, N.O.S.	PYROPHORIC SOLID INORGANIC NOS (PALLADIUM)
Hazard Class:	4.2	4.2
UN Number:	UN3200	UN2846
Packing Group:	I	I
Additional Info:		DO NOT MIX W CLASS 8

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 7440-05-3 is 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.

SARA Codes

CAS # 7440-05-3: fire.

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.

Clean Water Act:

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.

OSHA:

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

STATE

CAS# 7440-05-3 can be found on the following state right to know lists: California.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

Not available.

Risk Phrases:

R 43 May cause sensitization by skin contact.

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

S 33 Take precautionary measures against static discharges.

WGK (Water Danger/Protection)

CAS# 7440-05-3: 0

Canada - DSL/NDSL

CAS# 7440-05-3 is listed on Canada's DSL List.

Canada - WHMIS

not available.

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

Section 16 - Additional Information

MSDS Creation Date: 1/13/1998

Revision #3 Date: 8/15/2005

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.