

MATERIAL SAFETY DATA SHEET (MSDS)

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EM SCIENCE

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer.....: EM SCIENCE
A Division of EM Industries
P.O. Box 70
480 Democrat Road
Gibbstown, N.J. 08027

Preparation Date.: 3/1/91

Information Phone Number.: 856-423-6300
Hours: Mon. to Fri. 8:30-5
Chemtrec Emergency Number: 800-424-9300
Hours: 24 hrs a day

Catalog Number(s):

PX0005

Product Name:

Palladium on Powdered Charcoal, 10%

Synonyms:

N/A

Chemical Family:

Catalyst Mixture

Formula:

Pd on C

Molecular Weight.:

106.4 (Pd)

2. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS #	Appr %
Palladium	7440-05-3	10%
Charcoal	7440-44-0	90%

Approx. % as wt/wt

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Combustible Solid.

CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE.

Prolonged Or Repeated Inhalation Of Dust May Cause May Cause Pulmonary Disorders.

Appearance:

Black powder

POTENTIAL HEALTH EFFECTS (ACUTE AND CHRONIC)**Symptoms of Exposure:**

Prolonged or repeated inhalation of dust may cause pulmonary disorders.

Medical Cond. Aggravated by Exposure:

Respiratory conditions

Routes of Entry:

Inhalation, ingestion

Carcinogenicity:

The material is not listed (IARC, NTP, OSHA) as cancer causing agent.

4. FIRST AID MEASURES

Emergency First Aid:

GET MEDICAL ASSISTANCE FOR ALL CASES OF OVEREXPOSURE.

Skin: Wash thoroughly with soap and water.

Eyes: Immediately flush thoroughly with water for at least 15 minutes.

Inhalation: Remove to fresh air; give artificial respiration if breathing has stopped.

Ingestion: If conscious, drink water and induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Flash Point (F): None

Flammable Limits LEL (%): N/A

Flammable Limits UEL (%): N/A

Extinguishing Media:

Water spray, foam

Fire Fighting Procedures:

Wear self-contained breathing apparatus.

Fire & Explosion Hazards:

Airborne dust may be explosion hazard. May undergo spontaneous heating and ignition when wet.

6. ACCIDENTAL RELEASE MEASURES

Spill Response:

Evacuate the area of all unnecessary personnel. Wear suitable protective equipment listed under Exposure / Personal Protection. Eliminate any ignition sources until the area is determined to be free from explosion or fire hazards. Contain the release and eliminate its source, if this can be done without risk. Take up and containerize for proper disposal as described under Disposal. Comply with Federal, State, and local regulations on reporting releases. Refer to Regulatory Information for reportable quantity and other regulatory data.

7. HANDLING AND STORAGE

Handling & Storage:

Keep container closed and protected from physical damage. Store in a cool, dry area, away from oxidizers. Do not get in eyes.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT:

Ventilation, Respiratory Protection, Protective Clothing, Eye Protection:

Material should be handled or transferred in an approved fume hood or with adequate ventilation. Protective gloves should be worn to prevent skin contact (Neoprene or equivalent) Safety glasses with side shields should be worn at all times.

Work/Hygenic Practices:

Wash thoroughly after handling. Do not take internally. Eye wash and safety equipment should be readily available.

EXPOSURE GUIDELINES

OSHA - PEL:

Component	TWA		STEL		CL		Skin
	PPM	MG/M3	PPM	MG/M3	PPM	MG/M3	
Palladium							
Charcoal		5					

ACGIH - TLV:

Component	TWA		STEL		CL		Skin
	PPM	MG/M3	PPM	MG/M3	PPM	MG/M3	
Palladium							
Charcoal		2					

If there are no exposure limit numbers listed in the Exposure Guidelines chart, this indicates that no OSHA or ACGIH exposure limits have been established.

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point (C 760 mmHg) : N/A

Melting Point (C) : N/A

Specific Gravity (H₂O = 1) : N/A

Vapor Pressure (mm Hg) : N/A

Percent Volatile by vol (%) : None

Vapor Density (Air = 1) : N/A

Evaporation Rate (BuAc = 1) : N/A

Solubility in Water (%) : Insoluble

Appearance :

Black powder

10. STABILITY AND REACTIVITY

Stability: Yes

Hazardous Polymerization:

Does not occur

Hazardous Decomposition:

None indicated

Conditions to Avoid:

Dust dispersion

Materials To Avoid:

- Water
- Acids
- Bases
- Corrosives
- Oxidizers
- Other: Al, S, (H₂ + isoPropyl Alcohol)

11. TOXICOLOGICAL INFORMATION

Toxicity Data

None established

Toxicological Findings:

None

Cited in Registry of Toxic Effects of Chemical Substances (RTECS)

12. DISPOSAL CONSIDERATIONS

EPA Waste Numbers: D001

Treatment:

Specified Technology - Contact your local permitted waste disposal site (TSD) for permissible treatment sites.
ALWAYS CONTACT A PERMITTED WASTE DISPOSER (TSD) TO ASSURE COMPLIANCE WITH ALL
CURRENT LOCAL, STATE AND FEDERAL REGULATIONS.

13. TRANSPORT INFORMATION

DOT Proper Shipping Name:

non-regulated

DOT ID Number :

none

14. REGULATORY INFORMATION

TSCA Statement:

This product is a "Mixture". The CAS numbers of all components are listed on the TSCA Inventory.

Component	SARA EHS (302)	SARA EHS TPQ (lbs)	CERCLA RQ (lbs)
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Palladium

Charcoal

Component	OSHA Floor List	SARA 313	DeMinimis for SARA 313 (%)
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Palladium

Charcoal

If there is no information listed on the regulatory information chart, this indicates that the chemical is not covered by the specific regulation listed.

15. OTHER INFORMATION

Comments:

None

NFPA Hazard Ratings:

Health : 1
Flammability : 0
Reactivity : 1
Special Hazards :

Revision History: 12/1/84 10/27/87 4/10/90

| = Revised Section

N/A = Not Available

N/E = None Established

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