

## MATERIAL SAFETY DATA SHEET

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Version 1.4

## Section 1 - Product and Company Information

Product Name PHENYLMERCURIC ACETATE, 97%  
 Product Number P27127  
 Brand ALDRICH

Company Sigma-Aldrich  
 Address 3050 Spruce Street  
 SAINT LOUIS MO 63103 US

Technical Phone: 800-325-5832  
 Fax: 800-325-5052  
 Emergency Phone: 314-776-6555

## Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313
PHENYLMERCURIC ACETATE	62-38-4	Yes

Formula C<sub>8</sub>H<sub>8</sub>HgO<sub>2</sub>

Synonyms Acetate phenylmercurique (French) \*  
 (Acetato)phenylmercury \* Acetic acid,  
 phenylmercury deriv. \* (Acetoxymercuri)benzene \*  
 Acetoxyphenylmercury \* Algimycin 200 \* Anticon \*  
 Antimucin WBR \* Antimucin WDR \* Benzene,  
 (acetoxymercuri)- \* Bufen \* Bufen 30 \* Ceresol \*  
 Contra Creme \* Dyanacide \* Femma \*  
 Fenylmerkuriacetat (Czech) \* Fungicide R \*  
 Fungitox OR \* Hexasan \* Hexasan (fungicide) \*  
 Intercide 60 \* Intercide PMA 18 \* Liquiphene \*  
 Lorophyn \* Mercuriphenyl acetate \* Mercuron \*  
 Mercury (II) acetate, phenyl- \* Mercury,  
 acetoxyphenyl- \* Mergal A 25 \* Mersolite D \*  
 Mersolite 8 \* Neantina \* Norforms \* Nuodex PMA 18  
 \* Nylmerate \* Octan fenylrtutnaty (Czech) \*  
 Panomatic \* Phenomercuric acetate \*  
 Phenylmercuriacetate \* Phenyl mercuric acetate \*  
 Phenylmercury acetate \* Phenylmercury(II) acetate  
 \* Phenylquecksilberacetat (German) \* Phix \* PMA  
 (fungicide) \* PMAC \* PMAS \* Programin \*  
 Purasan-SC-10 \* Puraturf 10 \* Quicksan \* Quicksan  
 20 \* RCRA waste number P092 \* Ruberon \* Samtol \*  
 Sanitized SPG \* Scutl \* Seed Dressing R \* Seedtox  
 \* Setrete \* Shimmerex \* Spor-Kil \* Spruce Seal \*  
 Tag \* Tag 331 \* Tag fungicide \* Tag HL 331 \*  
 Trigosan \* Troysan 30 \* Troysan PMA 30 \* Verdasan  
 \* Volpar \* Zaprawa Nasienna R \* Ziarnik

RTECS Number: OV6475000

## Section 3 - Hazards Identification

## EMERGENCY OVERVIEW

Highly Toxic (USA) Very Toxic (EU).

May cause harm to the unborn child. Very toxic by inhalation, in

contact with skin and if swallowed. Causes burns. Limited evidence of a carcinogenic effect.  
Possible mutagen. Target organ(s): Kidneys. Nerves.

For additional information on toxicity, please refer to Section 11.

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#### Section 4 - First Aid Measures

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##### INHALATION EXPOSURE

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

##### EYE EXPOSURE

Assure adequate flushing of the eyes by separating the eyelids with fingers.

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#### Section 5 - Fire Fighting Measures

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##### FLASH POINT

N/A

##### AUTOIGNITION TEMP

N/A

##### FLAMMABILITY

N/A

##### EXTINGUISHING MEDIA

Suitable: Carbon dioxide, dry chemical powder, or appropriate foam.

##### FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.  
Specific Hazard(s): Emits toxic fumes under fire conditions.

##### EXPOSURE HAZARD(S)

Material: Corrosive.

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#### Section 6 - Accidental Release Measures

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##### PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area.

##### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves. Wear disposable coveralls and discard them after use.

##### METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust.

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#### Section 7 - Handling and Storage

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##### HANDLING

User Exposure: Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

##### STORAGE

Suitable: Keep tightly closed. Store in a cool dry place.



## STABILITY

Materials to Avoid: Strong oxidizing agents, Strong reducing agents, Strong acids.

## HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide  
Mercury/mercury oxides.

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## Section 11 - Toxicological Information

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### ROUTE OF EXPOSURE

Multiple Routes: May be fatal if inhaled, swallowed, or absorbed through skin. Causes burns.

### TARGET ORGAN(S) OR SYSTEM(S)

Nerves. G.I. System. Kidneys.

### SIGNS AND SYMPTOMS OF EXPOSURE

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Inhalation may result in spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis, and pulmonary edema. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting.

### CONDITIONS AGGRAVATED BY EXPOSURE

May cause nervous system disturbances.

### TOXICITY DATA

Oral  
Rat  
41 mg/kg  
LD50

Oral  
Mouse  
13.25 mg/kg  
LD50

Intraperitoneal  
Mouse  
13 MG/KG  
LD50

Subcutaneous  
Mouse  
12 MG/KG  
LD50

Intravenous  
Mouse  
18 MG/KG  
LD50

Oral  
Chicken  
60 mg/kg  
LD50

Oral

Quail  
71 mg/kg  
LD50

Intraperitoneal  
Mammal  
10 MG/KG  
LD50

#### IRRITATION DATA

Skin  
Human  
0.1 mg  
24H  
Remarks: Severe irritation effect

Eyes  
Rabbit  
0.05 mg  
24H  
Remarks: Severe irritation effect

#### IARC CARCINOGEN LIST

Rating: Group 2B

#### CHRONIC EXPOSURE - TERATOGEN

Result: May cause congenital malformation in the fetus.

Species: Rat  
Dose: 15 MG/KG  
Route of Application: Oral  
Exposure Time: (6-10D PREG)  
Result: Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Specific Developmental Abnormalities: Homeostasis Specific Developmental Abnormalities: Other developmental abnormalities.

Species: Mouse  
Dose: 110 UG/KG  
Route of Application: Subcutaneous  
Exposure Time: (8D PREG)  
Result: Effects on Embryo or Fetus: Fetal death.

Species: Mouse  
Dose: 110 UG/KG  
Route of Application: Intravaginal  
Exposure Time: (7D PREG)  
Result: Effects on Embryo or Fetus: Fetal death. Specific Developmental Abnormalities: Musculoskeletal system.

Species: Rabbit  
Dose: 9 MG/KG  
Route of Application: Oral  
Exposure Time: (8-12D PREG)  
Result: Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Specific Developmental Abnormalities: Homeostasis Specific Developmental Abnormalities: Other developmental abnormalities.

Species: Hamster

Dose: 20 MG/KG  
Route of Application: Oral  
Exposure Time: (5D PREG)  
Result: Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

Species: Hamster  
Dose: 8 MG/KG  
Route of Application: Intravenous  
Exposure Time: (8D PREG)  
Result: Specific Developmental Abnormalities: Central nervous system.

#### CHRONIC EXPOSURE - MUTAGEN

Species: Human  
Dose: 30 MG/L  
Cell Type: lymphocyte  
Mutation test: Sister chromatid exchange

Species: Mouse  
Dose: 1 UMOL/L  
Cell Type: lymphocyte  
Mutation test: DNA inhibition

Species: Mouse  
Dose: 10 UMOL/L  
Cell Type: lymphocyte  
Mutation test: Other mutation test systems

Species: Pig  
Route: Oral  
Dose: 160 MG/KG  
Exposure Time: 32D  
Mutation test: Cytogenetic analysis

#### CHRONIC EXPOSURE - REPRODUCTIVE HAZARD

Species: Hamster  
Dose: 7500 UG/KG  
Route of Application: Intravenous  
Exposure Time: (8D PREG)  
Result: Specific Developmental Abnormalities: Homeostasis  
Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).

Species: Mammal  
Dose: 125 UG/KG  
Route of Application: Intraperitoneal  
Exposure Time: (8D PREG)  
Result: Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).

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#### Section 12 - Ecological Information

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No data available.

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#### Section 13 - Disposal Considerations

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APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Treat a dilute basic solution (pH 10-11) of the material with a 50% excess of commercial laundry bleach. Control the temperature by the addition rate of bleach and adjust pH if necessary. Let stand overnight. Cautiously adjust solution to pH 7. Vigorous evolution of gas may occur. Filter any solids for burial in a chemical landfill. Precipitate any heavy metals by addition of sulfide and isolate for burial. Additional equivalents of hypochlorite may be needed if the metal can be oxidized to a higher valence state. For metal carbonyls, the reaction should be carried out under nitrogen. Observe all federal, state, and local environmental regulations.

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## Section 14 - Transport Information

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### DOT

Proper Shipping Name: Phenylmercuric acetate  
UN#: 1674  
Class: 6.1  
Packing Group: Packing Group II  
Hazard Label: Toxic substances.  
PIH: Not PIH

### IATA

Proper Shipping Name: Phenylmercuric acetate  
IATA UN Number: 1674  
Hazard Class: 6.1  
Packing Group: II

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## Section 15 - Regulatory Information

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### EU DIRECTIVES CLASSIFICATION

Symbol of Danger: T-N  
Indication of Danger: Toxic. Dangerous for the environment.  
R: 25-34-48/24/25-50/53  
Risk Statements: Toxic if swallowed. Causes burns. Toxic: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
S: 23-24/25-37-45-60-61  
Safety Statements: Do not breathe vapor. Avoid contact with skin and eyes. Wear suitable gloves. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/safety data sheets.

### US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Highly Toxic (USA) Very Toxic (EU).  
Risk Statements: May cause harm to the unborn child. Very toxic by inhalation, in contact with skin and if swallowed. Causes burns. Limited evidence of a carcinogenic effect.  
Safety Statements: Avoid exposure - obtain special instructions before use. Do not breathe dust. Wear suitable protective clothing. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
US Statements: Possible mutagen. Target organ(s): Kidneys. Nerves.

### UNITED STATES REGULATORY INFORMATION

SARA LISTED: Yes  
NOTES: This product is subject to SARA section 313 reporting requirements - mercury compounds.

TSCA INVENTORY ITEM: Yes

UNITED STATES - STATE REGULATORY INFORMATION

CALIFORNIA PROP - 65

California Prop - 65: This product is or contains chemical(s) known to the state of California to cause developmental toxicity.

CANADA REGULATORY INFORMATION

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

DSL: Yes

NDSL: No

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Section 16 - Other Information

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DISCLAIMER

For R&D use only. Not for drug, household or other uses.

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2008 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.