

1 - Product and Company Information

ProductName PHOSFOLAN, 1GM, NEAT

2 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT

Very toxic in contact with skin and if swallowed.

3 - Composition/Information on Ingredients

Product Name	CAS #	EC no	Annex I
PHOSFOLAN	947-02-4	None	None

Molecular Weight 255.31 AMU
Synonyms AC 47031 * American cyanamid 47031 * American cyanamid AC 47,031 * American cyanamid CL-47031 * CL 47031 * Cyclic ethylene(diethoxyphosphinothioyl)dithioimidocarbonate * Cyclic ethylene p,p-diethyl phosphonodithioimidocarbonate * Cyolane * (Diethoxyphosphinyl)dithioimidocarbonic acid cyclic ethylene ester * 2-(Diethoxyphosphinylimino)-1,3-dithiolane * P,P-Diethyl cyclic ethylene ester of phosphonodithioimidocarbonic acid * EI 47031 * ENT 25,830 * 1,2-Ethanedithiol, cyclic ester with P,P-diethyl phosphonodithioimidocarbonate * 1,2-Ethanedithiol, cyclic S,S-ester with phosphonodithioimidocarbonic acid P,P-diethyl ester * Imidocarbonic acid, (diethoxyphosphinyl)dithio-, cyclic ethylene ester * Imidocarbonic acid, phosphonodithio-, P,P-diethyl cyclic ethylene ester * OMS 646 * Phosfolan * Phospholan * Phosphoramidic acid, 1,3-dithiolan-2-ylidene-, diethyl ester

4 - First Aid Measures

AFTER INHALATION

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

AFTER SKIN CONTACT

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

AFTER EYE CONTACT

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately.

5 - Fire Fighting Measures

EXTINGUISHING MEDIA

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

SPECIAL RISKS

Specific Hazard(s): Emits toxic fumes under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6 - Accidental Release Measures

PERSONAL PRECAUTION PROCEDURES 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.

METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

7 - Handling and Storage

HANDLING

Directions for Safe Handling: Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

STORAGE

Conditions of Storage: Keep tightly closed.

Store at 2-8°C

8 - Exposure Controls / Personal Protection

ENGINEERING CONTROLS

Safety shower and eye bath. Use only in a chemical fume hood.

GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Wash thoroughly after handling.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

Hand Protection: Compatible chemical-resistant gloves.

Eye Protection: Chemical safety goggles.

9 - Physical and Chemical Properties

Appearance	Physical State: Solid
	Color: Yellow
	Form: Crystalline

Property	Value	At Temperature or Pressure
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pH N/A

BP/BP Range N/A

MP/MP Range 37.0 - 45.0 °C

Flash Point N/A

Flammability N/A

Autoignition Temp N/A

Oxidizing Properties N/A

Explosive Properties N/A

Explosion Limits N/A

Vapor Pressure N/A

Partition Coefficient N/A

Viscosity N/A

Vapor Density N/A

Saturated Vapor Conc. N/A

Evaporation Rate N/A

Bulk Density N/A

Decomposition Temp. N/A

Solvent Content N/A

Water Content N/A

Surface Tension N/A

Conductivity N/A

Miscellaneous Data N/A

Solubility N/A

10 - Stability and Reactivity

STABILITY

Stable: Stable.

Materials to Avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

11 - Toxicological Information

RTECS NUMBER: NJ6475000

ACUTE TOXICITY

LD50

Oral

Rat

8.9 mg/kg

LD50

Oral

12 mg/kg

LD50

Skin

Rabbit

23 mg/kg

LD50

Skin

Guinea pig

LD50

Oral

2.37 mg/kg

LD50

Oral

23.7 mg/kg

LD50

Bird (wild)

2.37 mg/kg

ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.

Skin Absorption: May be fatal if absorbed through skin.

Inhalation: Material may cause eye irritation to upper respiratory tract. May be harmful if inhaled.

Ingestion: May be fatal if swallowed.

12 - Ecological Information

No data available.

13 - Disposal Considerations

SUBSTANCE DISPOSAL

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible

solvent and burn in a chemical incinerator equipped with an afterburner and scrubbers. Observe all federal, state, and local

environmental regulations. If the respirator is the sole means of protection, use a full-face supplied air respirator.

Hand Protection: Compatible chemical-resistant gloves.

Eye Protection: Chemical safety goggles.

14 - Transport Information

RID/ADR

UN#: 3464

Class: 6.1

PG: I

Proper Shipping Name: Organophosphorus compound, toxic, solid, n.o.s.

toxic, solid, n.o.s.

Marine Pollutant: No

Severe Marine Pollutant: No

Technical Name: Required

IATA

UN#: 3464

Class: 6.1

PG: I

Proper Shipping Name: Organophosphorus compound, toxic, solid, n.o.s.

toxic, solid, n.o.s.

Inhalation Packing Group: I

Technical Name: Required

IMDG

UN#: 3464

Class: 6.1

PG: I

Proper Shipping Name: Organophosphorus compound, toxic, solid, n.o.s.

toxic, solid, n.o.s.

Inhalation Packing Group: I

Technical Name: Required

TDG

UN#: 3464

Class: 6.1

PG: I

Proper Shipping Name: Organophosphorus compound, toxic, solid, n.o.s.

toxic, solid, n.o.s.

Inhalation Packing Group: I

Technical Name: Required

TDG

UN#: 3464

Class: 6.1

PG: I

Proper Shipping Name: Organophosphorus compound, toxic, solid, n.o.s.

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