

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
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
Mouse
12 mg/kg

LD50
Skin
Rabbit
23 mg/kg

LD50
Skin
Guinea pig
54 mg/kg

LD50
Oral
Pigeon
2.37 mg/kg

LD50
Oral
Quail
23.7 mg/kg

LD50
Oral
Bird (wild)
2.37 mg/kg

ROUTE OF EXPOSURE
Skin Contact: May cause skin irritation.
Skin Absorption: May be fatal if absorbed through skin.
Eye Contact: May cause eye irritation.
Inhalation: Material may be irritating to mucous membranes and 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 scrubber. Observe all federal, state, and local environmental regulations.

14 - Transport Information

RID/ADR
UN#: 3464
Class: 6.1
PG: I
Proper Shipping Name: Organophosphorus compound,
toxic, solid, n.o.s.

IMDG
UN#: 3464
Class: 6.1
PG: I
Proper Shipping Name: Organophosphorus compound,
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.
Inhalation Packing Group I: No
Technical Name: Required

15 - Regulatory Information

CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES
ANNEX I INDEX NUMBER: 015-111-00-X
INDICATION OF DANGER: T+
Very toxic.
R-PHRASES: 27/28
Very toxic in contact with skin and if swallowed.
S-PHRASES: 28-36/37-45
After contact with skin, wash immediately with plenty of soap-suds. Wear suitable protective clothing and gloves. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

COUNTRY SPECIFIC INFORMATION

Germany
WGK: 2
Self-Classification

16 - Other Information



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WARRANTY:
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