



MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Formulator: Gowan Company
P.O. Box 5569
Yuma, Arizona 85366-5569
(928) 783-8844

For 24-Hour Emergency Assistance (Spill, Leak, Fire, or Exposure), Call CHEMTREC®:

For MEDICAL Emergency:

Inside the U.S.: (800) 424-9300
Outside the U.S.: (703) 527-3887
(888) 478-0798

Product: Imidan 70-W
EPA Signal Word: Warning
Active Ingredient: Phosmet (70.0%)
Chemical Name: N-(Mercaptomethyl)phthalimide, S-(O,O-dimethyl phosphorodithioate)
Chemical Class: Organophosphorous Pesticide

EPA Registration No.: 10163-169
CAS No.: 732-11-6

2. HAZARDS IDENTIFICATION

Physical Properties

Appearance: Tan powder
Odor: Mercaptan odor

Symptoms of Acute Exposure

The active ingredient is an organophosphate, which, produces cholinesterase inhibition in experimental animals. Symptoms of cholinesterase inhibition include salivation, sweating, headache, nausea, muscle twitching, tremors, incoordination, blurred vision, tears, abdominal cramps, diarrhea, and chest discomfort. Exposure to high concentrations of dust may result in symptoms related to cholinesterase inhibition.

Medical Conditions Likely to be Aggravated by Exposure

No specific medical conditions are known which may be aggravated by exposure to the active ingredient in this product; however, any disease, medication, or prior exposure which reduces normal cholinesterase activity may increase susceptibility to the toxic effects of the active ingredient.

Primary Routes of Exposure

Harmful if ingested, inhaled, absorbed into skin or if it comes into contact with the eyes.

Hazardous Decomposition Products

Combustion products; toxic materials

Unusual Fire, Explosion, and Reactivity Hazards

Not defined as flammable or combustible. However, under fire conditions, the product may support combustion and decompose to give off toxic materials.

3. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	OSHA – PEL	ACGIH – TLV	OTHER	NTP/IARC/OSHA CARCINOGEN
Phosmet (70.0%)	None	None	Not established	No

Only the identities of the active ingredient(s) and any *hazardous* inert ingredients are listed. Specific information on all of this product's ingredients can be obtained by the treating medical professional or spill emergency responder for the management of exposures, spills, or safety assessments.

4. FIRST AID MEASURES

If poisoning is suspected, immediately contact a physician, the nearest hospital, or the nearest Poison Control Center. Tell the person contacted the complete product name, and the type and amount of exposure. Describe any symptoms and follow the advice given.

- Ingestion:** Immediately give several glasses of water and induce vomiting by gagging the victim with a finger placed on the back of the victim's tongue. Give fluids until vomit is clear. If victim is unconscious or convulsing, do not induce vomiting or give anything by mouth.
- Inhalation:** Remove to fresh air. If not breathing, clear victim's airway and start mouth-to-mouth artificial respiration. If breathing is difficult, give oxygen, preferably with a physician's assistance.
- Eye Contact:** Immediately flush eyes with plenty of water. Get medical attention if irritation persists.
- Skin Contact:** Flush all affected areas with plenty of water for several minutes. Seek medical attention if skin irritation occurs.

Note to Physician

May cause cholinesterase depression. Atropine sulfate is antidotal. 2-PAM is also antidotal and may be administered in conjunction with atropine. Administer atropine sulfate in large therapeutic doses. Repeat as necessary to the point of tolerance. Compound inhibits cholinesterase, resulting in stimulation of the central nervous system, the parasympathetic nervous system and the somatic motor nerves. Do not give morphine. Watch for pulmonary edema, which may develop in serious cases of poisoning even after 24-48 hours. At first sign of pulmonary edema, the patient should be placed in an oxygen tent and treated symptomatically.

FOR MEDICAL EMERGENCIES INVOLVING THIS PRODUCT, CALL TOLL FREE: (888) 478-0798

5. FIRE FIGHTING MEASURES

- Flashpoint (test method):** Not applicable
Flammable Limits (% in air): Not applicable
Autoignition Temperature: Not available

Appropriate Extinguishing Media

Use water spray, CO₂, and dry chemical.

Fire Fighting Guidance

The active ingredient in this formulation is a cholinesterase inhibitor. Refer to Section 4 – First Aid Measures for additional information regarding overexposure. Products of combustion are irritating to the respiratory tract and may cause breathing difficulty and pulmonary edema. Symptoms may be delayed several hours or longer depending upon the extent of exposure. As in any fire, prevent human exposure to fire, smoke, fumes, or products of combustion. Evacuate nonessential personnel from the fire area. Fire fighters should wear full face self-contained breathing apparatus and impervious protective clothing. Use standard fire fighting techniques to extinguish fires involving this material - use water spray, dry chemicals, or carbon dioxide. Use of high pressure water hose may spread product from broken containers increasing contamination hazard. Contaminated buildings, areas, and equipment must not be used until they are properly decontaminated.

Unusual Fire, Explosion, and Reactivity Hazards

Not defined as flammable or combustible. However, under fire conditions, the product may support combustion and decompose to give off toxic materials.

6. ACCIDENTAL RELEASE MEASURES

In Case of Spills or Leaks

Small spills can be handled routinely. Any person entering either a significant spill area, an area with inadequate ventilation, or an area with an unknown concentration of a gas, vapor, or dust should use an air-supplied respirator to prevent inhalation exposure. Wear protective clothing and eye protection to prevent skin and eye contact. Sweep up spilled material, being careful not to create dust. Place sweepings in an open drum. Generously cover the contaminated area with a common, powdered household detergent. Using a stiff brush and small amounts of water, work the detergent into the spill material forming a slurry. Do not splatter on one's self or bystanders, and completely avoid skin or eye contact with this material. Brush the slurry into cracks and crevices and allow to stand for 2-3 minutes. Spread a suitable absorbent such as clay, sawdust, or kitty litter on the slurried liquid. Shovel absorbed material into an open drum. Repeat if necessary. Flush area with water while observing proper environmental considerations. Seal drum and dispose of contaminated material in an approved pesticide landfill. Large spills must be handled according to a predetermined plan. For assistance in developing a plan, contact Gowan Company.

7. HANDLING AND STORAGE

May be harmful if swallowed, inhaled or absorbed through the skin. Avoid breathing spray mist. Avoid contact with skin, eyes, or clothing. Do not contaminate water, food or feed by storage or disposal. Store in the original container and keep closed. Store containers in a cool, dry place.

Precautions in Storing

DO NOT contaminate water, food or feed by storage or disposal.

Storage

Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food and feed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Control	This product is intended for use outdoors where engineering controls are not necessary. If use conditions are different (e.g. product reformulation or repackaging), employee exposure should be minimized using traditional techniques such as enclosed system design and/or local exhaust ventilation.
Eye/Face	Protective eyewear is not required; however to avoid eye contact with the material choose protective eyewear appropriate to exposure potential.
Skin Protection	Applicators and other handlers must wear long-sleeved shirt and long pants, waterproof gloves, shoes plus socks, and chemical-resistant headgear for overhead exposure.
Respiratory Protection	Use a dust/mist filtering respirator.
Additional Protection Information	Have eyewash and safety shower easily accessible to the work area. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining personal protective equipment (PPE). If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.
Applicators/Handlers	Applicators and other handlers must wear long-sleeved shirt and long pants, waterproof gloves, shoes plus socks, and chemical-resistant headgear for overhead exposure.
User Safety Recommendations:	Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Tan powder
Odor:	Odorless
Melting Point:	Not applicable
Boiling Point:	Not applicable
Specific Gravity/ Density:	15 lbs./ft ³
Solubility in H₂O	
Phosmet	Not applicable
Vapor Pressure	
Phosmet	Not applicable

10. STABILITY AND REACTIVITY

Stability:	Stable under normal storage conditions
Hazardous Polymerization:	Will not occur
Decomposition Products:	Combustion products; toxic materials.
Hazardous Mixtures:	Relatively non-reactive. Non-corrosive to materials commonly used in the construction of process equipment, storage, and shipping containers
Conditions To Avoid:	Excessive heat.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies

Ingestion:	Acute Oral LD ₅₀ (rat):	275 mg/kg (male), 258 mg/kg (female) body weight
Dermal:	Acute Dermal LD ₅₀ (rabbit):	>2000 mg/kg (sexes combined)
Inhalation:	Acute Inhalation LC ₅₀ (rat):	>1.6 mg/L (sexes combined) 4 hours
Skin Sensitizer:	Not a skin sensitizer	

Carcinogenic Potential

None

12. ECOLOGICAL INFORMATION

Summary of Effects

Phosmet

This pesticide is toxic to fish and wildlife. For terrestrial uses, do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of wastes. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites. This product is toxic to bees exposed to direct treatment. Do not apply this product while bees are actively visiting the treatment area.

13. DISPOSAL CONSIDERATION

Pesticide Disposal

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal

Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill, or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

14. TRANSPORT INFORMATION

DOT Classification

UN 2783, Organophosphorus pesticide , solid, toxic, (Phosmet), 6.1, PG III

International Maritime Organization

UN 2783, Organophosphorus pesticide , solid, toxic, (Phosmet), 6.1, PG III, Marine Pollutant

International Civil Aviation Organization

UN 2783, Organophosphorus pesticide , solid, toxic, (Phosmet), 6.1, PG III

15. REGULATORY INFORMATION

SARA Title III Classification

Section 302/304: Not applicable
Section 311/312: Immediate (acute) health hazard
Section 313 chemical(s): Not applicable

Extremely Hazardous Substance (EHS)

Not applicable

Proposition 65

Not applicable

RCRA Classification

If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

16. OTHER INFORMATION

NFPA Hazard Ratings

Health: 2
Flammability: 0
Reactivity: 0

0	Least
1	Slight
2	Moderate
3	High
4	Severe

Notice: The information and recommendations contained herein are provided in good faith and are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information herein.

Prepared By:

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