

1 Identification

· Product identifier

· Trade name: **Imidan® 70-W**

EPA Registration No.:10163-169

· CAS Number: Active Ingredient: Phosmet (70.0%), CAS:732-11-6

· Application of the substance / the mixture Agricultural Insecticide

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Gowan Company

P.O. Box 5569

Yuma, Arizona 85366-5569

(928) 783-8844

· Information department: sds@gowanco.com

· Emergency telephone number:

Chemtrec® Emergency Telephone 24 - Hours: (Spills, leak or fire) Inside U.S. & Canada: (800) 424-9300
Outside the U.S. & Canada: +011 (703) 527-3887

For medical emergency (Prosar®): (888) 478-0798

2 Hazard(s) identification

· Classification of the substance or mixture



Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H332 Harmful if inhaled.

· Label elements

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



GHS07

· Signal word Warning

· Hazard-determining components of labeling:

phosmet (ISO)

· Hazard statements

Harmful if swallowed or if inhaled.

· Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash thoroughly after handling.

If swallowed: Call a poison center/doctor if you feel unwell.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Call a poison center/doctor if you feel unwell.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· Hazard description:

May be fatal if swallowed, inhaled or absorbed through the skin. Avoid contact with eyes, skin, or clothing.
Avoid breathing spray mist. Causes moderate eye irritation.

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA

Printing date 09/02/2015

Reviewed on 09/02/2015

Trade name: Imidan® 70-W
EPA Registration No.:10163-169

(Contd. of page 1)

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



HAZARD INDEX:

4 Severe Hazard
 3 Serious Hazard
 2 Moderate Hazard
 1 Slight Hazard
 0 Minimal Hazard

· **HMIS-ratings (scale 0 - 4)**



HAZARD INDEX:

4 Severe Hazard
 3 Serious Hazard
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· **Other hazards**

· **Results of PBT and vPvB assessment**

- **PBT:** Not applicable in US.
- **vPvB:** Not applicable in US.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

| | | |
|----------|--|-------|
| 732-11-6 | phosmet (ISO) | 70.0% |
| | ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312 | |

4 First-aid measures

· **Description of first aid measures**

· **General information:**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

You may also contact 1-888-478-0798 for emergency medical treatment information.

· **After inhalation:**

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
- Call poison control center or doctor for further treatment advice.

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA

Printing date 09/02/2015

Reviewed on 09/02/2015

Trade name: Imidan® 70-W
EPA Registration No.:10163-169

(Contd. of page 2)

- **After skin contact:**
 - Take off contaminated clothing.
 - Rinse skin immediately with plenty of water for 15-20 minutes.
 - Call a poison control center or doctor for treatment advice.
- **After eye contact:**
 - Hold eye open and rinse slowly and gently with water for 15-20 minutes.
 - Remove contact lenses, if present, after first 5 minutes, then continue rinsing eyes.
 - Call a poison control center or doctor for treatment advice.
- **After swallowing:**
 - Call a poison control center or doctor immediately for treatment advice.
 - Have person sip a glass of water if able to swallow.
 - Do not induce vomiting unless told to do so by a poison control center or doctor.
 - Do not give anything by mouth to an unconscious person.
- **Information for doctor:**
 - **Most important symptoms and effects, both acute and delayed** Unknown
 - **Indication of any immediate medical attention and special treatment needed**
This product is an organophosphate insecticide. If symptoms of cholinesterase inhibition are present, atropine sulfate by injection is antidotal. 2-PAM is an antidotal and may be administered, but only in conjunction with atropine.

5 Fire-fighting measures

- **Extinguishing media**
 - **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**
Not defined as flammable or combustible. However, under fire conditions, the product may support combustion and decompose to give off toxic materials.
- **Advice for firefighters**
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.
 - **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
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.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
A small spill can be handled routinely. Use adequate ventilation and wear an air-supplied respirator to prevent inhalation. Wear suitable protective clothing and eye protection to prevent skin and eye contact. Use the following procedures:

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA

Printing date 09/02/2015

Reviewed on 09/02/2015

Trade name: Imidan® 70-W
EPA Registration No.:10163-169

(Contd. of page 3)

1. Sweep up spilled material being careful not to create dust.
2. Place sweepings in an open drum.
3. Generously cover the contaminated areas with a common 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. Completely avoid skin and eye contact with this material. Brush the slurry into cracks and crevices and allow to stand for 2 - 3 minutes.
4. Spread a suitable absorbent such as clay, sawdust, or kitty litter on the slurried liquid. Shovel absorbed material into an open drum.
5. Repeat if necessary.
6. 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.

· **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

* 7 Handling and storage

· **Handling:**

· **Precautions for safe handling**

May be fatal if swallowed, inhaled or absorbed through the skin. Avoid contact with eyes, skin, or clothing. Avoid breathing spray mist. Causes moderate eye irritation. Do not contaminate water, food or feed by storage or disposal. Store in the original container and keep closed

· **Information about protection against explosions and fires:** No special measures required.

· **Conditions for safe storage, including any incompatibilities**

If a leaky container must be contained within another, mark the outer container to identify the contents. The storage area must be dry, well-lit, and well-ventilated.

· **Storage:**

· **Requirements to be met by storerooms and receptacles:** Store in a cool, dry place.

· **Information about storage in one common storage facility:** Store away from foodstuffs.

· **Further information about storage conditions:** Keep receptacle tightly sealed.

· **Specific end use(s)** No further relevant information available.

* 8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Control parameters**

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.

· **Components with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· **Additional 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

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA

Printing date 09/02/2015

Reviewed on 09/02/2015

Trade name: Imidan® 70-W
EPA Registration No.:10163-169

(Contd. of page 4)

wash PPE separately from other laundry.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

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.

· **Breathing equipment:** Use a dust/mist filtering respirator.

· **Protection of hands:**



Protective gloves

· **Material of gloves:** Chemical-resistant gloves.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** Goggles recommended during refilling.

· **Body protection:**

Protective work clothing

Mixers, loaders, and applicators using engineering controls, including enclosed-cockpit aerial equipment and enclosed-cab ground equipment, and mixers, loaders, and applicators using handheld equipment or handheld nozzles must wear at least (see engineering control section of this labeling for more requirements and options):

- Long-sleeved shirt and long pants,
- Shoes plus socks,
- Chemical-resistant gloves when mixing and loading, and when applying with handheld equipment or handheld nozzles, and
- Chemical-resistant apron when mixing and loading.

Motorized ground equipment applicators not in an enclosed cab, applicators dipping pine seedlings, and handlers engaged in cleaning up a spill or leak, or cleaning or repairing contaminated equipment, must wear:

- Coveralls over long-sleeve shirt and long pants,
- Chemical-resistant gloves,
- Chemical-resistant footwear plus socks,
- Chemical-resistant headgear for overhead exposure,
- Chemical-resistant apron, if exposed to the concentrate or applying as a pine seedling dip, and
- A respirator with an organic-vapor cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH-approved respirator with an organic vapor (OV) cartridge or canister with any

N, R or P or He prefilter.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

· **Form:** Powder

(Contd. on page 6)

US

Safety Data Sheet

acc. to OSHA

Printing date 09/02/2015

Reviewed on 09/02/2015

Trade name: Imidan® 70-W
EPA Registration No.:10163-169

(Contd. of page 5)

| | |
|---|---|
| · Color: | Light beige |
| · Odor: | Pungent |
| · Odour threshold: | Not determined. |
| · pH-value at 20 °C (68 °F): | 6.6 |
| · Change in condition | |
| · Melting point/Melting range: | Undetermined. |
| · Boiling point/Boiling range: | Undetermined. |
| · Flash point: | Not applicable. |
| · Flammability (solid, gaseous): | Not determined. |
| · Ignition temperature: | |
| · Decomposition temperature: | Not determined. |
| · Auto igniting: | Product is not self-igniting. |
| · Danger of explosion: | Product does not present an explosion hazard. |
| · Explosion limits: | |
| · Lower: | Not determined. |
| · Upper: | Not determined. |
| · Vapor pressure: | Not applicable. |
| · Density at 20 °C (68 °F): | 0.24 g/cm ³ (2.003 lbs/gal) |
| · Relative density | Not determined. |
| · Vapour density | Not applicable. |
| · Evaporation rate | Not applicable. |
| · Solubility in / Miscibility with | |
| · Water: | Dispersible. |
| · Partition coefficient (n-octanol/water): | Not determined. |
| · Viscosity: | |
| · Dynamic: | Not applicable. |
| · Kinematic: | Not applicable. |
| · Other information | No further relevant information available. |

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability** Stable under normal conditions
 - **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** Excessive heat.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** Combustion products; toxic materials.

US

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA

Printing date 09/02/2015

Reviewed on 09/02/2015

Trade name: Imidan® 70-W
EPA Registration No.:10163-169

(Contd. of page 6)

11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

| | | |
|------------|----------|--|
| Oral | LD50 | 275 mg/kg (rat) (male) 258 mg/kg (rat) (female) |
| Dermal | LD50 | >2000 mg/kg (rabbit) (sexes combined) |
| Inhalative | LC50/4 h | 3.16 mg/l (rat) (sexes combined) |

· **Primary irritant effect:**

- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.

· **Additional toxicological information:**

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

None of the ingredients are listed.

· **NTP (National Toxicology Program)**

None of the ingredients are listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients are listed.

12 Ecological information

· **Toxicity**

This chemical can contaminate surface water through aerial and ground spray applications. Under some conditions, it may also have a high potential for runoff into surface water after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlaying tile drainage systems that drain to surface water.

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high-water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate.

This product is highly toxic to bees exposed directly to application residues on crops. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. Protective information may be obtained from your Cooperative Agricultural Extension Service.

- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
 - **Bioaccumulative potential** No further relevant information available.
 - **Mobility in soil** No further relevant information available.

(Contd. on page 8)

US

Safety Data Sheet

acc. to OSHA

Printing date 09/02/2015

Reviewed on 09/02/2015

Trade name: Imidan® 70-W
EPA Registration No.:10163-169


(Contd. of page 7)

- **Ecotoxicological effects:**
- **Other information:**
This product is toxic to bees exposed to direct treatment. Do not apply this product while bees are actively visiting the treatment area.
- **Additional ecological information:**
 - **General notes:**
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
- **Results of PBT and vPvB assessment**
 - **PBT:** *Not applicable.*
 - **vPvB:** *Not applicable.*
- **Other adverse effects** *No further relevant information available.*

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).
- **Uncleaned packagings:**
 - **Recommendation:**
Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available or 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

- | | |
|---|--|
| · UN-Number | |
| · DOT, ADR, IMDG, IATA | UN2783 |
| · UN proper shipping name | |
| · ADR | 2783 ORGANOPHOSPHORUS PESTICIDE, SOLID, TOXIC (phosmet) |
| · IMDG | ORGANOPHOSPHORUS PESTICIDE, SOLID, TOXIC (phosmet), MARINE POLLUTANT |
| · IATA | ORGANOPHOSPHORUS PESTICIDE, SOLID, TOXIC (phosmet) |
| · Transport hazard class(es) | |
| · ADR, IATA | |
|  | |
| · Class | 6 |
| · Label | 6.1 |

(Contd. on page 9)

US

Safety Data Sheet

acc. to OSHA

Printing date 09/02/2015

Reviewed on 09/02/2015

Trade name: Imidan® 70-W
EPA Registration No.:10163-169

(Contd. of page 8)

· **IMDG**

· **Class** 6
 · **Label** 6.1

· **Packing group**

· **ADR, IMDG, IATA** III

· **Environmental hazards:**

Product contains environmentally hazardous substances: phosmet (ISO)

· **Marine pollutant:**

Yes
 Symbol (fish and tree)

· **Special precautions for user**

Not applicable

· **Danger code (Kemler):**

60

· **EMS Number:**

F-A,S-F

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable

· **UN "Model Regulation":**

UN2783, ORGANOPHOSPHORUS PESTICIDE, SOLID, TOXIC (phosmet (ISO)), 6.1, III

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

EPA /FIFRA Information:

This chemical is a pesticide product registered by the Environmental Protection Agency (EPA) and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals.

· **SARA Title III**· **Section 355 (extremely hazardous substances):**

732-11-6 phosmet (ISO)

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

· **TSCA (Toxic Substances Control Act):**

None of the ingredients are listed.

· **Proposition 65**· **Chemicals known to cause cancer:**

None of the ingredients are listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

(Contd. on page 10)

Safety Data Sheet

acc. to OSHA

Printing date 09/02/2015

Reviewed on 09/02/2015

Trade name: Imidan® 70-W
EPA Registration No.:10163-169

(Contd. of page 9)

· **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

· **Carcinogenicity categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients are listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients are listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients are listed.

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**

Not applicable

· **Signal word:**

(USA EPA) WARNING

· **Hazard-determining components of labeling:**

phosmet (ISO)

· **Hazard statements**

May be fatal if swallowed, inhaled or absorbed through the skin. Avoid contact with eyes, skin, or clothing. Avoid breathing spray mist. Causes moderate eye irritation.

· **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash thoroughly after handling.

If swallowed: Call a poison center/doctor if you feel unwell.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Call a poison center/doctor if you feel unwell.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

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.

· **Department issuing SDS:** Supply Chain

· **Contact:** sds@gowanco.com

· **Date of preparation / last revision** 09/02/2015 / 3

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

(Contd. on page 11)

Safety Data Sheet

acc. to OSHA

Printing date 09/02/2015

Reviewed on 09/02/2015

Trade name: Imidan® 70-W
EPA Registration No.:10163-169

(Contd. of page 10)

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity, Hazard Category 4

Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

· **Sources Imidan® is a registered trademark of Gowan Company, LLC.**

· *** Data compared to the previous version altered.**

US