1. CHEMICAL IDENTIFICATION

Product: Imidan 2.5 EC
EPA Signal Word: Warning
EPA Registration No.: 10163-215
Active Ingredient: Phosmet (27.5%)
CAS No.: 732-11-6
Chemical Name: N-(Mercaptomethyl)phthalimide, S-(O,O-dimethyl phosphorodithioate)
Chemical Class: Organophosphorous Pesticide

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>INGREDIENT NAME</th>
<th>OSHA – PEL</th>
<th>ACGIH – TLV</th>
<th>OTHER</th>
<th>NTP/IARC/OSHA CARCINOGEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosmet (27.5%)</td>
<td>None</td>
<td>None</td>
<td>Not established</td>
<td>No</td>
</tr>
<tr>
<td>Naphthalenes (8.4%)</td>
<td>10 PPM</td>
<td>10 ppm</td>
<td>Not established</td>
<td>No</td>
</tr>
<tr>
<td>CAS# 91-20-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

Physical Properties
Appearance: Slight yellow liquid
Odor: Aromatic solvent 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.

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
Burning can form carbon monoxide.

Unusual Fire, Explosion, and Reactivity Hazards
High heat, sparks, open flame, or strong oxidizers may ignite this material.
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:** Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger or if available by administering syrup of ipecac. If person is unconscious, do not give anything by mouth and do not induce vomiting.

**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):** Minimum 200°F (93°C) TCC

**Appropriate Extinguishing Media**
Use water spray, CO₂, foam, 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**
High heat, sparks, open flame, or strong oxidizers may ignite this material.

6. ACCIDENTAL RELEASE MEASURES

**In Case of Spills or Leaks**
Eliminate all ignition sources; notify spill response personnel; stop the leakage; ventilate the area if appropriate. Dike a large spill; transfer to tank. Use suitable absorbent for a small spill; shovel into containers. Make sure all personnel involved in the spill cleanup follow good industrial hygiene practices. Any person entering either a significant spill area or an unknown concentration of a gas, vapor, or dust should use a NIOSH-approved pesticide respirator. Small spills can be handled routinely. Use adequate ventilation and/or wear a NIOSH-approved pesticide respirator to prevent inhalation exposure. Wear protective clothing to prevent inhalation exposure. Wear protective clothing to prevent skin and eye contact.
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
Class IIIB combustible liquid storage is required by OSHA (CFR 1910.106). Protect against physical damage; store separate from oxidizing materials. Do not store within reach of children. Containers should be stored in a cool, dry, well-ventilated area away from flammable materials and sources of heat or flame. Exercise caution to prevent damage due to leakage from the container. Keep food and animal feed in separate areas away from the storage or use location.

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.

Personal Protection

<table>
<thead>
<tr>
<th>Eye/Face</th>
<th>Wear protective eyewear such as chemical safety glasses, goggles, or a face shield.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Protection</td>
<td>Applicators and other handlers should wear long-sleeved shirt and long pants, chemical-resistant gloves such as Barrier Laminate or Viton ≥ 14 mils, shoes plus socks.</td>
</tr>
<tr>
<td>Respiratory Protection</td>
<td>Not required; but to avoid inhalation of excess vapors wear a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C).</td>
</tr>
<tr>
<td>Additional Protection Information</td>
<td>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.</td>
</tr>
<tr>
<td>Applicators/Handlers</td>
<td>Applicators and other handlers should wear long-sleeved shirt and long pants, chemical-resistant gloves such as Barrier Laminate or Viton ≥ 14 mils, shoes plus socks.</td>
</tr>
<tr>
<td>User Safety Recommendations:</td>
<td>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.</td>
</tr>
</tbody>
</table>

9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance: | Slight yellow liquid |
| Odor:       | Aromatic solvent odor |
| Solubility in H₂O Phosmet | Negligible |
| Vapor Pressure Phosmet | 4.5E-07 mm Hg |
10. STABILITY AND REACTIVITY

Stability: Stable under normal storage conditions
Hazardous Polymerization: Will not occur
Decomposition Products: Burning can form carbon monoxide.
Hazardous Mixtures: Not determined
Conditions To Avoid: High heat, sparks, and open flames.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies

<table>
<thead>
<tr>
<th>Route</th>
<th>Effect Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>Acute Oral LD&lt;sub&gt;50&lt;/sub&gt; (rat)</td>
<td>179 mg/kg (combined sexes)</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Acute Inhalation LC&lt;sub&gt;50&lt;/sub&gt; (rat)</td>
<td>0.99 mg/L (combined sexes), 4 hours</td>
</tr>
<tr>
<td>Dermal</td>
<td>Acute Dermal LD&lt;sub&gt;50&lt;/sub&gt; (rabbit-male)</td>
<td>&gt;2000 mg/kg (combined sexes)</td>
</tr>
<tr>
<td>Eye Contact</td>
<td>Moderate to severe, reversible irritation</td>
<td></td>
</tr>
<tr>
<td>Skin Contact</td>
<td>Moderate, reversible irritation</td>
<td></td>
</tr>
<tr>
<td>Skin Sensitizer</td>
<td>Dermal sensitizer</td>
<td></td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

Summary of Effects
Phosmet
This material is extremely toxic to fish and wildlife. Do not contaminate water by cleaning of equipment or by disposal of wastes. Untreated effluent should not be discharged where it will drain into lakes, streams, or ponds.

13. DISPOSAL CONSIDERATION

Pesticide Disposal
Pesticide waste are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these waste cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional office for guidance.

Container Disposal
Triple rinse (or equivalent) the empty container. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

14. TRANSPORT INFORMATION

DOT Classification
Organophosphorus Pesticide, Liquid, Toxic, 6.1, UN 3018, PGIII

International Maritime Organization
Organophosphorus Pesticide, Liquid, Toxic, 6.1, UN 3018, PGIII, Marine Pollutant

International Civil Aviation Organization
Organophosphorus Pesticide, Liquid, Toxic, 6.1, UN 3018, PGIII, Marine Pollutant
15. REGULATORY INFORMATION

SARA Title III Classification
Section 302/304: Not applicable
Section 311/312: Immediate (acute) health hazard
Fire hazard
Section 313 chemical(s): Not applicable

Extremely Hazardous Substance (EHS)
Not applicable

Proposition 65
Not applicable

CERCLA Reportable Quantity (RQ)
130 gals product (100 lbs. Naphthalene)

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.

TSCA Status
Exempt from TSCA

16. OTHER INFORMATION

NFPA Hazard Ratings
| Health: 2 | 0 Least |
| Flammability: 1 | 1 Slight |
| Reactivity: 0 | 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:
Gowan Company
(928) 783-8844

Imidan® is a registered trademark of Gowan Company, L.L.C.