



MATERIAL SAFETY DATA SHEET

# Lorsban<sup>®</sup> 50-W

Product: *Insecticide*  
Formulator: Gowan Company  
P.O. Box 5569  
Yuma, Arizona 85366-5569  
(520)783-8844  
Emergency Phone: (520) 783-3803  
For 24-Hour Emergency Assistance (Spill, Leak, Fire, or Exposure), Call CHEMTREC<sup>®</sup>:  
For MEDICAL Emergency: Inside the U.S.: (800) 424-9300  
Outside the U.S.: (703) 527-3887  
(800) 225-5635 ext. 283

## 1. CHEMICAL IDENTIFICATION

Product: **LORSBAN 50-W**  
EPA Signal Word: Danger-Poison  
Active Ingredient: Chlorpyrifos (50.0%)  
Chemical Name: O,O-Diethyl O-(3,5,6-trichloro-2-pyridinyl) phosphorothioate  
Chemical Class: Inorganic Pesticide  
EPA Registration No.: 62719-221-10163  
CAS No.: 002921-88-2

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	OSHA – PEL	ACGIH – TLV	OTHER	NTP/IARC/OSHA CARCINOGEN
Chlorpyrifos (50.0%)	Not established	0.2 mg/m <sup>3</sup>	Not established	No

## 3. HAZARDS IDENTIFICATION

### Physical Properties

Appearance: Light gray powder  
Odor: Mercaptan-type odor

### Symptoms of Over Exposure

Excessive exposure may produce organophosphate type cholinesterase inhibition. Signs and symptoms of excessive exposure to active ingredient may be headache, dizziness, incoordination, muscle twitching, tremors, nausea, abdominal cramps, diarrhea, sweating, pinpoint pupils, blurred vision, salivation, tearing, tightness in chest, excessive urination, and convulsions. Active ingredient produced mild adrenal effects when fed to rats, but only at doses that greatly exceed any exposures that would be received during use of this product.

### Medical Conditions Likely to be Aggravated by Exposure

Not available

### Relevant Routes of Exposure

May be harmful if swallowed or inhaled. Keep out of eyes.

### Hazardous Decomposition Products

If product is involved in fire, hydrogen chloride, ethyl sulfide, diethyl sulfide and nitrogen oxides can be formed.

### Unusual Fire, Explosion, and Reactivity Hazards

Toxic irritating gases may be formed above 160°C (320°F)

---

## 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. Do not induce vomiting or give anything by mouth to an unconscious person.

**Inhalation:** Remove victim to fresh air if effects occur. Get medical attention.

**Eye Contact:** Flush with plenty of water for 5 minutes. Get medical attention if irritation persists.

**Skin Contact:** Wash with plenty of soap and water. Get medical attention if irritation persists.

### Note to Physician

Chlorpyrifos is a cholinesterase inhibitor. Treat symptomatically. If exposed, plasma and red blood cell cholinesterase tests may indicate significance of exposure (baseline data are useful). Atropine, only by injection, is the preferable antidote. Oximes, such as 2-PAM/protopam, may be therapeutic if used early; however, use only in conjunction with atropine. In case of severe acute poisoning, use antidote immediately after establishing an open airway and respiration.

### **!! IN ALL CASES OF SUSPECTED POISONING, GET MEDICAL ATTENTION IMMEDIATELY !!**

For emergency **MEDICAL** response and hazard communication **ONLY**, call:

**Hazard Information Services at (800) 228-5635 ext. 283.**

---

## 5. FIRE FIGHTING MEASURES

---

**Flashpoint (test method):** Not applicable

**Flammable Limits (% in air):** Not applicable

**Autoignition Temperature:** Not available

### Appropriate Extinguishing Media

If product is involved in fire, use water fog, foam, CO<sub>2</sub>; foam preferred. Water, if used, must not enter sewers.

### Fire Fighting Guidance

Use positive-pressure, self-contained breathing apparatus and full protective clothing.

### Unusual Fire, Explosion, and Reactivity Hazards

Toxic irritating gases may be formed above 160°C (320°F).

---

## 6. ACCIDENTAL RELEASE MEASURES

---

### In Case of Spills or Leaks

Sweep up and place in suitable containers for disposal.

---

## 7. HANDLING AND STORAGE

---

### Precautions in Storing and Handling

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Store in original container in secured dry storage area. Handle carefully to avoid breakage; packets may become brittle when stored below 32°F. Prevent cross-contamination with other pesticides and fertilizers. Do not store above 100°F for extended periods of time. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container in accordance with label instructions.

---

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

---

### Engineering Controls

Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

<b>Eye/Face</b>	Protective eyewear is required.
<b>Skin Protection</b>	Applicators and other handlers must wear long-sleeved shirt and long pants, waterproof gloves, and shoes plus socks. Chemical-resistant headgear must be worn for overhead exposure.
<b>Respiratory Protection</b>	Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, wear an approved air-purifying respirator. In dusty atmospheres, use an approved dust respirator.

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

---

<b>Appearance:</b>	Light gray powder
<b>Odor:</b>	mercaptan-type odor
<b>Physical State:</b>	Solid
<b>Melting Point:</b>	Not applicable
<b>Boiling Point:</b>	Not applicable
<b>Specific Gravity/ Density:</b>	13.0 lb./cu. ft.

<b>Solubility in H<sub>2</sub>O</b>	
<b>Chlorpyrifos</b>	Wettable powder
<b>Vapor Pressure</b>	
<b>Chlorpyrifos</b>	Very low

---

## 10. STABILITY AND REACTIVITY

---

<b>Stability:</b>	Stable under normal conditions
<b>Hazardous</b>	
<b>Polymerization:</b>	Will not occur
<b>Hazardous Mixtures:</b>	Alkaline materials. Consult manufacturer for specific cases.
<b>Conditions to Avoid:</b>	Avoid high temperatures. Store below 100°F (38°C). Chlorpyrifos undergoes exothermic decomposition at approximately 130°C (266°F) which can lead to higher temperatures and violent decomposition if generated heat is not removed.
<b>Decomposition</b>	
<b>Products:</b>	If product is involved in fire, hydrogen chloride, ethyl sulfide, diethyl sulfide and nitrogen oxides can be formed.

---

## 11. TOXICOLOGICAL INFORMATION

---

### Acute Toxicity/Irritation Studies

<b>Ingestion:</b>	Moderately toxic	
	Acute Oral LD <sub>50</sub> (rat-female):	382 mg/kg
<b>Dermal:</b>	Slightly toxic	
	Acute Dermal LD <sub>50</sub> (rabbit):	>2,000 mg/kg
<b>Inhalation:</b>	Inhalation LC <sub>50</sub> (rat):	>1.5 mg/kg – 4 hours
<b>Eye Contact:</b>	Slight irritant	
<b>Skin Contact:</b>	Not a skin irritant	

### Mutagenic Potential

Not available

### Reproductive Hazard Potential

Not available

---

## 11. TOXICOLOGICAL INFORMATION (continued)

---

### Chronic/Subchronic Toxicity Studies

Not available

### Carcinogenic Potential

None

### Other Toxicity Information

Not available

---

## 12. ECOLOGICAL INFORMATION

---

### Summary of Effects

#### Chlorpyrifos

This pesticide is toxic to birds and wildlife, and extremely toxic to fish and aquatic organisms. 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 from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites. Cover or incorporate spills. Do not contaminate water when disposing of equipment wash waters. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Avoid use when bees are actively foraging or if bees are likely to come into contact with wet or re-wetted treated surfaces. Protective information may be obtained from your Cooperative Extension Service. This product may pose a hazard to certain Federally endangered fish species. Refer to the "Endangered Species Restrictions" section of the label for any geographic restrictions.

### Eco-Acute Toxicity

Not available

### Environmental Fate

Not available

---

## 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

When all bags are used, dispose of empty packaging 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

RQ, Environmentally Hazardous Substance, Solid, N.O.S. (Chlorpyrifos), 9, UN 3077, PG III, NAERG# 171  
(Add "Marine Pollutant" if shipped by water)

### International Maritime Organization

RQ, Environmentally Hazardous Substance, Solid, N.O.S. (Chlorpyrifos), 9, UN 3077, PG III, Marine Pollutant, EmS # 6.1-04, MFAG 505, NAERG# 171

### International Civil Aviation Organization

RQ, Environmentally Hazardous Substance, Solid, N.O.S. (Chlorpyrifos), 9, UN 3077, PG III, Marine Pollutant, NAERG# 171

---

## 15. REGULATORY INFORMATION

---

### SARA Title III Classification

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

### Proposition 65

Not applicable

### CERCLA Reportable Quantity (RQ)

2 lbs. of Lorsban (1 lb. Chlorpyrifos)

---

## 16. OTHER INFORMATION

---

### NFPA Hazard Ratings

<b>Health:</b>	2	0	Least
<b>Flammability:</b>	2	1	Slight
<b>Reactivity:</b>	1	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  
(520) 783-8844

### Revision Date:

January 17, 2000

### Printing Date:

January 17, 2000

\*denotes trademark of DowElanco