

1 Identification

· **Product identifier**

· **Trade name:** Lorsban® 75WG

EPA Registration No.: 62719-301-10163

· **CAS Number:** Active Ingredient: Chlorpyrifos (75.0%), CAS:2921-88-2

· **Application of the substance / the mixture** Agrochemical 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 (Prostar®): (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.

Aquatic Acute 2 H401 Toxic to aquatic life.

· **Label elements**

· **GHS label elements**

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

· **Hazard pictograms**



· **Signal word** Warning

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

chlorpyrifos (ISO)

· **Hazard statements**

H302+H332 Harmful if swallowed or if inhaled.

H401 Toxic to aquatic life.

· **Precautionary statements**

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.

P330 Rinse mouth.

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P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Hazard description:** May Be Fatal If Swallowed · May Be Fatal If Inhaled.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 2

Reactivity = 1

· **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:**

CAS: 2921-88-2	chlorpyrifos (ISO)	75.0%
Acute Tox. 3, H301; Aquatic Acute 1, H400; Aquatic Chronic 1, H410		

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.

· **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

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· **Indication of any immediate medical attention and special treatment needed**

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.

5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:**

CO₂, extinguishing powder or water spray. Fight larger fire with alcohol resistant foam.

· **Special hazards arising from the substance or mixture** *No further relevant information available.*

· **Advice for firefighters**

Do not permit dust to accumulate. Dust layers can be ignited by spontaneous combustion or other ignition sources. When suspended in air dust can pose an explosion hazard. Container may vent and/or rupture due to fire.

· **Protective equipment:** *Wear self-contained respiratory protective device.*

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**

Not required.

May Be Fatal If Swallowed · May Be Fatal If Inhaled

Do not breathe dust. Wear a mask.

· **Environmental precautions:** *Do not allow to enter sewers/ surface or ground water.*

· **Methods and material for containment and cleaning up:**

Dispose contaminated material as waste according to item 13.

· **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** *Store in cool, dry place in tightly closed receptacles.*

· **Information about protection against explosions and fires:** *Keep ignition sources away - Do not smoke.*

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

· **Storage:**

· **Requirements to be met by storerooms and receptacles:**

Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers. Avoid storing above 122°F for extended periods of time. Packets may become brittle when stored below 32°F.

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

· **Further information about storage conditions:** *Store in a cool, dry place.*

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

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8 Exposure controls/personal protection

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

· **Control parameters**

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

CAS: 2921-88-2 chlorpyrifos (ISO)

REL Short-term value: 0.6 mg/m³

Long-term value: 0.2 mg/m³

Skin

TLV Long-term value: 0.1* mg/m³

Skin; BEI-A; *as inhalable fraction and vapor

· **Ingredients with biological limit values:**

CAS: 2921-88-2 chlorpyrifos (ISO)

BEI 70 % of baseline

Medium: red blood cells

Time: discretionary

Parameter: Cholinesterase activity (nonspecific)

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

· **Breathing equipment:**

Wear a mask or pesticide respirator jointly approved by the Mine Safety and Health Administration and the National Institute for Occupational Safety and Health.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **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:**



Safety glasses

· **Body protection:**

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves
- Chemical-resistant apron when mixing or loading
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposures
- A NIOSH-approved dust mist filtering respirator with MSHA/NIOSH approval number TC-21C or a

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NIOSH-approved respirator with any N, P, R or HE filter.

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9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

- **Form:** Granulate
- **Color:** Tan
- **Odor:** Mild mercaptan
- **Odor threshold:** Not determined.

· **pH-value at 20 °C (68 °F):** 7.8

· **Change in condition**

- **Melting point/Melting range:** Undetermined.
- **Boiling point/Boiling range:** Undetermined.

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Not determined.

· **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):** 0.58 g/cm³ (4.8401 lbs/gal)

- **Relative density** Not determined.
- **Vapor 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.

· **Solvent content:**

· **Organic solvents:** 0.0 %

· **Other information** No further relevant information available.

10 Stability and reactivity

· **Reactivity** No further relevant information available.

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- **Chemical stability**
 Unstable at elevated temperatures. Avoid temperatures above 158°F (70°C). Product can decompose at elevated temperatures.
- **Thermal decomposition / conditions to be avoided:** Avoid temperatures above 158°F (70°C).
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** Avoid temperatures above 158°F (70°C).
- **Incompatible materials:** Oxidizing materials, acids, and bases.
- **Hazardous decomposition products:**
 Hydrogen chloride (HCl)
 Organic sulfides
 Sulfur dioxide (SO_x)

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

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

Oral	LD50	>500 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rat)
Inhalative	LC50/4 h	200 mg/l (rat)

- **Primary irritant effect:**
 - **on the skin:** No irritant effect.
 - **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
 The product shows the following dangers according to internally approved calculation methods for preparations:
 Toxic

· **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 pesticide is toxic to fish, aquatic invertebrates, small mammals and birds. Do not apply directly to water, 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 water adjacent to treated areas. Do not contaminate water when cleaning equipment or disposing of equipment washwaters. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.

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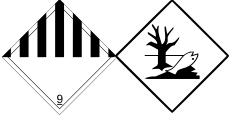
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- **Behavior in environmental systems:**
 - **Bioaccumulative potential** No further relevant information available.
 - **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
 - **Remark:** Toxic for fish
- **Additional ecological information:**
 - **General notes:**
 - Water hazard class 3 (Self-assessment): extremely hazardous for water
 - Do not allow product to reach ground water, water course or sewage system, even in small quantities.
 - Danger to drinking water if even extremely small quantities leak into the ground.
 - Also poisonous for fish and plankton in water bodies.
 - Very toxic for aquatic organisms
- **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:**
 - Waste resulting from the use of this product (that cannot be used according to label instructions) may be disposed of on site or at an approved waste disposal facility.
- **Uncleaned packagings:**
 - **Recommendation:**
 - Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available.

14 Transport information

- | | |
|--|--|
| <ul style="list-style-type: none"> · UN-Number · DOT, ADR, IMDG, IATA | UN3077 |
| <ul style="list-style-type: none"> · UN proper shipping name · ADR · IMDG · IATA | 3077 Environmentally hazardous substances, solid, n.o.s. (chlorpyrifos (ISO))
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (chlorpyrifos (ISO)), MARINE POLLUTANT
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (chlorpyrifos (ISO)) |
| <ul style="list-style-type: none"> · Transport hazard class(es) · ADR, IMDG, IATA | <div style="display: flex; align-items: center; justify-content: center;">  </div> <ul style="list-style-type: none"> · Class · Label |
| | 9 Miscellaneous dangerous substances and articles
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· Packing group · ADR, IMDG, IATA	III
· Environmental hazards: · Marine pollutant:	<i>Product contains environmentally hazardous substances: chlorpyrifos (ISO)</i> <i>Yes</i>
· Special marking (ADR): · Special marking (IATA):	<i>Symbol (fish and tree)</i> <i>Symbol (fish and tree)</i>
· Special precautions for user · Danger code (Kemler): · EMS Number:	<i>Warning: Miscellaneous dangerous substances and articles</i> <i>60</i> <i>F-A,S-F</i>
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	<i>Not applicable</i>
· Transport/Additional information: · Quantity limitations	<i>On passenger aircraft/rail: 100 kg</i> <i>On cargo aircraft only: 200 kg</i>
· ADR · Excepted quantities (EQ)	<i>Code: E1</i> <i>Maximum net quantity per inner packaging: 30 g</i> <i>Maximum net quantity per outer packaging: 1000 g</i>
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	<i>5 kg</i> <i>Code: E1</i> <i>Maximum net quantity per inner packaging: 30 g</i> <i>Maximum net quantity per outer packaging: 1000 g</i>
· UN "Model Regulation":	<i>UN3077, Environmentally hazardous substances, solid, n.o.s. (chlorpyrifos (ISO)), 9, III</i>

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):**

None of the ingredients are listed.

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

None of the ingredients are listed.

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

None of the ingredients are listed.

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· **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.

· **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)**

CAS: 2921-88-2 chlorpyrifos (ISO)

A4

· **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 EA) WARNING

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

chlorpyrifos (ISO)

· **Hazard statements**

H302+H332 Harmful if swallowed or if inhaled.

H401 Toxic to aquatic life.

· **Precautionary statements**

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.

P330 Rinse mouth.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

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16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Supply Chain

· **Contact:** sds@gowanco.com

· **Date of preparation / last revision** 02/14/2019 / 6

· **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

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEL: Biological Exposure Limit

Acute Tox. 3: Acute toxicity – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard – Category 2

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

· **Sources** Lorsban® is a registered trademark of Dow AgroSciences LLC