

MATERIAL SAFETY DATA SHEET

PYRIFOS 15G PCP# 24648

FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL DAY OR NIGHT 1-800-561-8273 or
CHEMTREC 1-800-424-9300

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

MANUFACTURED FOR:

UNITED AGRI PRODUCTS CANADA, INC.
789 Donnybrook Drive • Dorchester, Ontario N0L 1G5

24-Hour Emergency Phone: 1-800-561-8273
Medical Emergencies (Prosar): 1-800-301-7976
Additional Emergency Phone (Canutec): 1-613-996-6666 (Collect)

CHEMICAL IDENTITY: Chlorpyrifos: O,O-diethyl O-3,5,6-trichloro-2-pyridyl phosphorothioate
PRODUCT USE: Insecticide – Group 1B
PCP REG. NO.: 24648
MSDS Number: 24648-08-UAP

MSDS Revisions: All sections

Date of Issue: 01/07/08

Supersedes: 01/07/05

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN – CAUTION - POISON – WARNING: Eye irritant. Harmful if swallowed. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Avoid contact with eyes, skin or clothing. **WARNING:** Contains the allergen tree nuts (Walnut). This product is not for use in and around homes or other residential areas such as parks, school grounds, or playing fields. For use only by certified applicators.

WARNING STATEMENTS:

NOTE TO PHYSICIAN: This product is an organophosphate (cholinesterase-inhibiting) insecticide. Atropine is antidotal and should be given in multiple doses as necessary until the patient is atropinized. In severe cases 2-PAM may be given provided therapy begins within 24 hours of exposure. Monitor serum and RBC cholinesterase. Administer intravenous fluids cautiously, if needed, to correct dehydration. Symptoms of cholinesterase inhibition include salivation, gastrointestinal hypermotility, abdominal cramping, nausea, diarrhea, sweating, miosis, tearing, blurred vision, headache, dizziness, ataxia, bradycardia, dyspnea, cyanosis, and muscle twitching or tremors. In extreme cases, tetany, mental confusion, incontinence, weakness, collapse, paralysis, convulsive seizures, and even death, can occur.

This product is a tan to light brown granule with mild solvent, mercaptan-like odor.

3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Chlorpyrifos	15.00	2921-88-2	0.1 IFV*

4. FIRST AID MEASURES

If in eyes: Hold eye open and rinse slowly and gently with water 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If on skin or clothing: 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.

If swallowed: Call a poison control center or doctor immediately for treatment advice. Have a 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.

If inhaled: 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 a poison control center or doctor for further treatment advice.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-800-301-7976. Have the product label or container with you when calling a poison control center or doctor, or going for treatment.

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method): Not applicable.

FLAMMABLE LIMITS (LFL & UFL): None established.

EXTINGUISHING MEDIA: Use medium appropriate to surrounding fire. Dry chemical, carbon dioxide, foam, water spray or fog.

HAZARDOUS COMBUSTION PRODUCTS: May include but are not limited to oxides of sulfur, oxides of nitrogen, oxides of carbon, phosphorous compounds, and hydrogen chloride.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus with full protective clothing. Fight fire from upwind and keep all non-essential personnel out of area.

UNUSUAL FIRE AND EXPLOSION HAZARDS: If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Do not allow water runoff to enter nearby streams, ponds or lakes. Keep containers cool with water spray to avoid possible explosion due to internal pressure buildup.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

In case of leak or spill, contain by absorbing spilled liquid with clay or other absorbent material; scoop or sweep up material and place in a container for possible land application according to label use or for proper disposal. Wash the spill area with water containing a strong detergent. Check local, state and federal regulations for proper disposal.

CAUTION: Keep spills and cleaning runoff from flowing onto adjacent land, or into municipal sewers and open bodies of water.

7. HANDLING AND STORAGE

HANDLING: Wash hands after handling, and 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. 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. See section 8 for PPE. Keep away from children.

STORAGE: Do not store above 100°F/37.8°C. Store in a safe manner. Store in original container only. Keep container tightly closed when not in use. Do not use or store near heat or open flame. Do not contaminate water, food or feed by storage or disposal.

Personal Protective Equipment: Applicators and other handlers must wear: long sleeved shirt and long pants, chemical resistant gloves such as barrier laminate or Viton® and shoes plus socks. Follow manufacturer's instructions for cleaning and maintaining PPE. If no instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets with requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40CFR 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

RESPIRATORY PROTECTION: Not normally required, if vapors or dusts exceed acceptable levels, wear a MSHA/NIOSH approved pesticide respirator with cartridges for organic vapors.

EYE PROTECTION: Chemical goggles or shielded safety glasses.

SKIN PROTECTION: Wear protective clothing: long-sleeved shirts and pants, hat, rubber boots with socks. Wear rubber or chemical-resistant gloves.

	OSHA PEL 8 hr TWA	ACGIH TLV-TWA
Chlorpyrifos	Not listed	0.1 mg/m ³ IFV (Skin)

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOUR: Tan to light brown granule with mild solvent, mercaptan-like odor

SPECIFIC GRAVITY (Water = 1): 0.48 – 0.64 g/ml

VAPOUR PRESSURE: Not applicable

PERCENT VOLATILE (by volume): Not established

Note: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

SOLUBILITY: Insoluble

pH: Not established

BULK DENSITY: 480 – 640 kg/cm³

BOILING POINT: Not applicable

EVAPORATION RATE: Not established

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Excessive heat; temperatures above 158°F / 70°C.

INCOMPATIBILITY: Oxidizers and bases.

HAZARDOUS DECOMPOSITION PRODUCTS: May include but are not limited to oxides of sulfur, oxides of nitrogen, oxides of carbon, phosphorous compounds, and hydrogen chloride from burning and hydrogen chloride, organic sulfides, and sulfur dioxide from decomposition.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (male rat): 2250 mg/kg

Eye Irritation (rabbit): May cause moderate eye irritation

Inhalation LC₅₀ (male rat): 2.06 mg/L (4 HR).

Carcinogenic Potential: Nothing listed in OSHA, NTP, IARC. ACGIH lists Chlorpyrifos as TLV-A4: Not Classifiable as a Human Carcinogen.

Acute Dermal LD₅₀ (rabbit): >5000 mg/kg

Skin Irritation (rabbit): May cause slight irritation

Skin Sensitization (Guinea Pig): Not a sensitizer

12. ECOLOGICAL INFORMATION

This pesticide is toxic to fish, aquatic invertebrates, small mammals and birds. 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 water adjacent to treated areas. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops. Do not apply this product or allow it to drift to blooming crops or weeds if bees are actively visiting the treatment area. Do not contaminate water when disposing of equipment wash waters or rinsate. Do not apply when weather conditions favor drift from target area.

13. DISPOSAL CONSIDERATIONS

Do not reuse containers for any purpose. Completely empty bag into application equipment. Container is to be disposed of at a container collection site. Contact your local dealer/distributor for the location of the nearest collection site. Before taking container to the collection site: make the empty container unsuitable for further use. If there is no container collection site in your area, dispose of the container in accordance with provincial requirements. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Do not contaminate water, food, or feed by storage or disposal.

14. TRANSPORT INFORMATION

DOT/TDG Shipping Description: RQ ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, UN3077, III (CHLORPYRIFOS) ERG GUIDE 171

U.S. Surface Freight Classification: INSECTICIDES, INSECT REPELLENTS, NOI, OTHER THAN POISON (NMFC 102120, CLASS: 60)

IMDG Shipping Description: RQ ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, UN3077, III (CHLORPYRIFOS) ERG GUIDE 171

15. REGULATORY INFORMATION

NFPA & HMIS Hazard Ratings:		NFPA		HMIS		
	1	Health	0	Least	1	Health
	1	Flammability	1	Slight	1	Flammability
	1	Instability	2	Moderate	1	Reactivity
			3	High	1	PPE
			4	Severe		

SARA Hazard Notification/Reporting

SARA Title III Hazard Category: Immediate Y Fire N Sudden Release of Pressure N
 Delayed N Reactive N

Reportable Quantity (RQ) under U.S. CERCLA: Chlorpyrifos (CAS: 2921-88-2) 1 lb.

SARA, Title III, Section 313: Not listed

RCRA Waste Code: Not listed

CA Proposition 65: Not listed

16. OTHER INFORMATION

MSDS STATUS: All sections revised to 16-section format

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental/ Regulatory Services

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*IFV – Measured as inhalable fraction and vapor.

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