

Safety Data Sheet

Issue Date: 15-Jan-2018

Revision Date: 22-Jan-2018

Version 1

1. IDENTIFICATION

Product Identifier

Product Name Pilot® 15G Chlorpyrifos Agricultural Insecticide

Other means of identification

SDS # GCI-007

Registration Number(s) EPA Reg. No. 93182-8
UN/ID No UN3077

Recommended use of the chemical and restrictions on use

Recommended Use Ready-to-Use Solid (Granular) insecticide for Agricultural insect control. Refer to product label for further details.

Details of the supplier of the safety data sheet

Manufacturer Address

GHARDA CHEMICALS INTERNATIONAL INC.
760 Newtown-Yardley Road
Suite 110
Newtown, PA USA 18940
Website: www.ghardausa.com
For further information contact: 1 (215) 968-9474

Emergency Telephone Number

Emergency Telephone (24 hr) MEDICAL EMERGENCY (24 hr): PROPHARMA (866)-359-5660
TRANSPORTATION OR SPILL (24 hr): CHEMTREC (800) 424-9300

2. HAZARDS IDENTIFICATION

Emergency Overview This chemical is a product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-EPA registered chemicals. Please see Section 15 for additional EPA information.

Appearance Brown/Tan soild

Physical state Solid

Odor Musty

Classification

Acute toxicity - Oral

Category 4

Signal Word

Warning

Hazard statements

Harmful if swallowed



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention
IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
Rinse mouth

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards

Very toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%
Chlorpyrifos	2921-88-2	15
Inert Ingredients	Proprietary	85

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First Aid Measures

General Advice	Provide this SDS to medical personnel for treatment.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a poison control center or doctor for treatment advice.
Skin Contact	Take off contaminated clothing. Wash off immediately with plenty of water for at least 15 minutes. Call a poison control center or doctor for treatment advice.
Inhalation	If inhaled remove to fresh air. Give oxygen if breathing is difficult. If breathing has stopped, call 911, give artificial respiration. Immediately call a physician.
Ingestion	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 without medical advice. Never give anything by mouth to an unconscious person.

Most important symptoms and effects

Symptoms	Harmful if swallowed.
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Indication of any immediate medical attention and special treatment needed

Notes 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.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Foam. Carbon dioxide (CO₂). Water spray (fog). Foam fire-extinguishing system is preferred because uncontrolled water can spread possible contamination.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

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

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protective equipment as required.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Isolate the spill. Hold this package, other cargo and vehicles involved. For Emergency spill assistance Call CHEMTREC (24-hour service): 1-800-535-5053.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feeding stuffs.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed and store in a cool, dry and well-ventilated place. Keep out of the reach of children. Prevent cross-contamination with other pesticides and fertilizers. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated on product label.

Incompatible Materials Alkaline materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Chlorpyrifos 2921-88-2	TWA: 0.1 mg/m ³ inhalable fraction and vapor S*	(vacated) TWA: 0.2 mg/m ³ (vacated) S*	TWA: 0.2 mg/m ³ STEL: 0.6 mg/m ³

Inert Ingredients	TWA: 1 mg/m ³ respirable particulate matter	-	-
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Appropriate engineering controls

Engineering Controls Showers. Eyewash stations. Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Use safety glasses.

Skin and Body Protection No precautions other than clean body-covering clothing should be needed.

Respiratory Protection Atmospheric levels should be maintained below the exposure guideline. In dusty atmospheres, use a NIOSH approved dust respirator.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Solid	Odor	Musty
Appearance	Brown/Tan soild	Odor Threshold	Not determined
Color	Brown/Tan		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	4.9 in 5.2% w/w aqueous dispersion	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	Not determined	
Flash Point	Not determined	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Not determined	
Flammability Limits in Air		
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapor Pressure	Low	
Vapor Density	Not applicable	
Relative Density	Not determined	
Water Solubility	Insoluble in water	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

Other Information

Density 46.5 lbs/ft3 (0.6968 gm/cm3)

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Avoid high temperatures. Do not store above 100°F. Chlorpyrifos undergoes exothermic decomposition at approximately 266°F (130°C) which can lead to higher temperatures and violent decomposition if generated heat is not removed.

Incompatible Materials

Alkaline materials.

Hazardous Decomposition Products

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

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Product Information**

Eye Contact May cause moderate eye irritation, which may be slow to heal. Corneal injury is unlikely.

Skin Contact Prolonged exposure is not likely to cause significant skin irritation. A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts.

Inhalation Single exposure to dust is not likely to be hazardous.

Ingestion Small amounts swallowed incidental to normal handling operations are not likely to cause injury; swallowing larger amounts may cause injury.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Chlorpyrifos 2921-88-2	= 135 mg/kg (Rat) = 82 mg/kg (Rat)	= 2 g/kg (Rabbit) > 5000 mg/kg (Rabbit) = 202 mg/kg (Rat)	> 200 mg/m ³ (Rat) 4 h
Inert Ingredients	> 5000 mg/kg (Rat)	-	-

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization This material is not considered to have significant skin sensitization potential in humans.

Germ cell mutagenicity Based on a majority of negative data and equivocal or marginally positive results, chlorpyrifos is considered to have minimal mutagenic potential.

Carcinogenicity Chlorpyrifos did not cause cancer in long-term animal studies.

Reproductive toxicity Chlorpyrifos did not interfere with fertility in reproduction studies in laboratory animals. Some evidence of toxicity to the offspring occurred, but only at a dose high enough to produce significant toxicity to the parent animals.

Teratogenicity Chlorpyrifos did not cause birth defects in laboratory animals.

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 599.00 mg/kg mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects. This pesticide is toxic to fish and wildlife. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from target areas. Do not contaminate water when disposing of equipment wash water or rinsate. 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.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Chlorpyrifos 2921-88-2		0.11 - 0.13: 96 h Pimephales promelas mg/L LC50 flow-through 0.008: 96 h Cyprinus carpio mg/L LC50 static 0.00717: 96 h Poecilia reticulata mg/L LC50 0.002 - 0.032: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.011: 96 h Oncorhynchus mykiss mg/L LC50 0.00717: 96 h Poecilia reticulata mg/L LC50 semi-static 0.0047 - 0.0075: 96 h Lepomis macrochirus mg/L LC50 flow-through 0.0013: 96 h Lepomis macrochirus mg/L LC50 static 0.001: 96 h Oncorhynchus mykiss mg/L LC50 static 0.0026: 96 h Lepomis macrochirus mg/L LC50	0.00012 - 0.00023: 48 h Daphnia magna mg/L EC50 Static 0.00009 - 0.00012: 48 h Daphnia magna mg/L EC50 Flow through
Inert Ingredients		8.0 - 19.0: 96 h Salmo gairdneri g/L LC50 19000: 96 h Oncorhynchus mykiss mg/L LC50 static	

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Chlorpyrifos 2921-88-2	4.96

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods**Disposal of Wastes**

Open dumping is prohibited. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of federal law. If these wastes 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.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Chlorpyrifos 2921-88-2	Toxic

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No UN3077
Proper Shipping Name Environmentally Hazardous Substance, Solid, n.o.s. (Chlorpyrifos)
Hazard Class 9
Packing Group III
Marine Pollutant Yes.

IATA

UN/ID No UN3077
Proper Shipping Name Environmentally Hazardous Substance, Solid, n.o.s. (Chlorpyrifos)
Hazard Class 9
Packing Group III
Marine Pollutant Yes

IMDG

UN/ID No UN3077
Proper Shipping Name Environmentally Hazardous Substance, Solid, n.o.s. (Chlorpyrifos)
Hazard Class 9
Packing Group III
Marine Pollutant Yes

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/E LINCS	ENCS	IECSC	KECL	PICCS	AICS
Chlorpyrifos	X	X	X	Present	X	Present	X	X
Inert Ingredients	X	X	X		X	Present	X	X

Legend:

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS** - Japan Existing and New Chemical Substances
- IECSC** - China Inventory of Existing Chemical Substances
- KECL** - Korean Existing and Evaluated Chemical Substances
- PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- AICS** - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Chlorpyrifos 2921-88-2	1 lb		RQ 1 lb final RQ RQ 0.454 kg final RQ

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Chlorpyrifos	1 lb			X

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Chlorpyrifos 2921-88-2	X	X	X

EPA Pesticide Registration Number EPA Reg. No. 93182-8

EPA Statement

This chemical is a pesticide product registered by the Environmental Protection Agency 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. Following is the hazard information as required on the pesticide label:

EPA Pesticide Label

SIGNAL WORD: CAUTION

Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Avoid breathing dust. Wash thoroughly with soap and water after handling

Difference between SDS and EPA pesticide label

	EPA	OSHA
Signal Word	Caution	Warning
Acute toxicity - Oral	Harmful if swallowed	Harmful if swallowed
Serious eye damage/eye irritation	Causes moderate eye irritation	NA

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards	Flammability	Instability	Special Hazards
	1	0	1	Not determined
<u>HMIS</u>	Health Hazards	Flammability	Physical hazards	Personal Protection
	Not determined	Not determined	Not determined	Not determined

Issue Date: 15-Jan-2018
Revision Date: 22-Jan-2018
Revision Note: New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet