

SAFETY DATA SHEET

1. IDENTIFICATION

Product identifier: GardenTech Daconil Fungicide Ready to Use
EPA Registration No: 67572-2-71004

Manufacturer Name: TechPac, LLC.
Address: 1000 Parkwood Circle Ste 700
Atlanta, GA 30339

Telephone number: 866-945-5033

Medical emergency 800-420-9347 **Transportation emergency:** 800-424-9300

Recommended use: Controls leaf spots, rust, blights, fruit rots, mildews, scab, molds on vegetables, fruits, roses, shrubs, trees and ornamentals. Read entire label and use strictly in accordance with label precautionary statements and directions.

Restrictions on use: It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Date of Preparation: September 11, 2014

2. HAZARD(S) IDENTIFICATION

Classification:

Physical	Health
Not hazardous	Not hazardous

Label Elements

Pictogram: None Required
Signal Word: None Required
Hazard Statement: None Required

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Percent
Chlorothalonil	1897-45-6	0.087
Inert Ingredients	Mixture	99.013

4. FIRST-AID MEASURES

Inhalation: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison center or doctor for further treatment advice.

Skin contact: Take off contaminated clothing. Immediately skin with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

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

Ingestion: Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person. Immediately call a poison center or doctor for treatment advice.

Most important symptoms/effects, acute and delayed: May cause mild eye irritation. Prolonged contact may cause skin irritation. Inhalation of high concentrations may cause drowsiness or dizziness. No adverse effects expected from incidental small ingestion.

Indication of immediate medical attention and special treatment, if necessary: Immediate medical attention is not required.

5. FIRE-FIGHTING MEASURES

Extinguishing media: Use media appropriate for surrounding fire.

Specific hazards arising from the chemical: Product is not flammable. Sealed containers may burst under fire conditions.

Special protective equipment and precautions for fire-fighters: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures: Wear appropriate protective clothing and equipment as described in Section 8.

Environmental Precautions: Prevent spill from entering sewers and water courses. Report releases as required by local and national authorities.

Methods and materials for containment and cleaning up: Collect with an inert absorbent and place into a suitable container for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling: Refer to pesticide label for additional safety precautions and instructions for use. Not for use on plants being grown for sale or other commercial seed production or research purposes. For use on plants intended for aesthetic purposes or climatic modification and being grown in interior plantscapes and ornamental gardens or parks. Also for use on fruit trees and vegetables. Do not allow people or pets to enter treated areas until sprays have dried. Do not apply this product in a way that will contact other persons or pets either directly or through drift. Do not use on home lawns and turf sites associated with apartment buildings, daycare centers, playgrounds, playfields, recreational park athletic fields, athletic fields located on or next to schools (i.e., elementary, middle or high schools), campgrounds, churches and theme parks. For normal outdoor use: Avoid breathing mist and spray. Avoid contact with eyes. Wash thoroughly with soap and water after handling. Processing and Packaging: Wear appropriate PPE as described in Section 8.

Conditions for safe storage, including any incompatibilities: Store in a cool, dry (preferably locked) place inaccessible to children and pets.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines:

Chlorothalonil	None Established
Inert Ingredients	None Established

Appropriate engineering controls: No special ventilation required for normal outdoor use. For processing and packaging, use with adequate general or local exhaust ventilation to minimize exposure levels.

Individual protection measures:

Respiratory protection: None needed under normal use conditions. For processing and packaging: if exposures are excessive, a NIOSH approved dust/mist respirator is recommended. Selection of respiratory protection depends on the contaminant type, form and concentration. Select in accordance with OSHA 1910.134 and good Industrial Hygiene practice.

Skin protection: None required for normal use. Impervious gloves recommended for bulk handling.

Eye protection: None required for normal use. Chemical safety goggles recommended for bulk handling.

Other: None known.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.): Tan liquid.

Odor: Odorless.

Odor threshold: Not applicable	pH: 6.5-7.5
Melting point/freezing point: Not applicable	Boiling Point: Not available
Flash point: Not flammable	Evaporation rate: Not available
Flammability (solid, gas): Not applicable	VOC: Not available
Flammable limits: LEL: Not applicable	UEL: Not applicable
Vapor pressure: Not available	Vapor density: Not available
Relative density: 1.00	Solubility(ies): Miscible in water
Partition coefficient: n-octanol/water: 3.05 (chlorothalonil)	Auto-ignition temperature: Not available
Decomposition temperature: Not available	Viscosity: Not available

10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal conditions of use.

Chemical stability: Stable.

Possibility of hazardous reactions: None known.

Conditions to avoid: None known.

Incompatible materials: None known.

Hazardous decomposition products: Thermal decomposition may yield carbon oxides and nitrogen.

11. TOXICOLOGICAL INFORMATION

Acute effects of exposure:

Inhalation: Inhalation may cause irritation of the mucous membranes and upper respiratory tract.

Ingestion: No adverse effects are expected for small quantities ingested. Ingestion of large quantities may cause gastrointestinal irritation with diarrhea and vomiting.

Skin contact: Prolonged skin contact may cause skin irritation. Prolonged or repeated contact may cause allergic skin reaction (sensitization).

Eye contact: Contact may cause eye irritation.

Chronic Effects: In dogs, 1 year administration of Chlorothalonil caused a significant decrease in body weight gain and increases in absolute liver and kidney weights.

Sensitization: Product may cause skin sensitization.

Germ Cell Mutagenicity: Neither chlorothalonil nor its metabolites interact with DNA and thus are not mutagenic. Chlorothalonil was negative in the Ames assay and the micronucleus test in mice bone marrow.

Reproductive Toxicity: None of the components are reproductive hazards. Chlorothalonil did not cause teratogenic effects in rabbit or rats in oral studies.

Carcinogenicity: Chlorothalonil is classified by IARC as Possibly Carcinogenic to Humans (2B). No evidence of carcinogenicity in dogs after administration for up to one year. Treatment related increases in the incidence of renal tubular and carcinoma re observed in rats and male mice. Squamous cell adenomas and carcinomas were also observed in the forestomach of both species. The forestomach tumors seen in rodent studies re not relevant to human health, as humans do not possess an anatomical equivalent of the rodent forestomach. The relevance of renal tumors to human health is unclear, although metabolism data suggest that the dog, a species that is resistant to chlorothalonil-induced renal injury, may be more representative of humans than the rat. Tumor formation has been related to a non-genotoxic mechanism of action for which threshold levels have been established in rats and mice. Comprehensive dietary and worker exposure studies have shown exposure levels for humans to be well below these threshold levels. In addition, surveillance of chlorothalonil plant workers for over twenty years has not demonstrated any increase in oncogenic potential to humans. None of the other components are listed as carcinogens or suspected carcinogens by IARC, NTP, ACGIH or OSHA.

Acute Toxicity Values: Calculated ATE (inhalation): 114.9 mg/l (mist)

Chlorothalonil: Oral rat LD50: >10,000 mg/kg; Inhalation rat LC50: 0.1 mg/L/4hr; Dermal rat LD50: >2500 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity values: This product is toxic to aquatic invertebrates and wildlife. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

Chlorothalonil: Bees LC/EC50: >181 ug/bee; Daphnia magna LC50/EC50: 0.068 ppm; Trout LC/EC50: 0.04 ppm; Bluegill LC/EC50: 0.06 ppm; Birds – Bobwhite Quail LC50/EC50: >5200 ppm/8-days; Birds – Mallard Duck LC50/EC50: >5,200 ppm/8-hr

Persistence and degradability: Chlorothalonil is not persistent in soil or water.

Bioaccumulative potential: Chlorothalonil has a low to moderate bioaccumulation potential.

Mobility in soil: Chlorothalonil has low mobility in soil.

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13. DISPOSAL CONSIDERATIONS

Dispose in accordance with all local, state and federal regulations. No specific disposal method is recommended.

Pesticide/Container Disposal: Non-refillable container; do not reuse or refill this container. If empty: Offer for recycling, if available; otherwise, discard in trash. If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

14. TRANSPORT INFORMATION

	UN Number	Proper shipping name	Hazard Class	Packing Group	Environmental Hazard
DOT		Not Regulated			
TDG		Not Regulated			
IMDG		Not Regulated			
IATA		Not Regulated			

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable – product is transported only in packaged form.

Special precautions: None known.

15. REGULATORY INFORMATION

This chemical is a pesticide product registered by the United States 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 (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

FIFRA Labeling:

PRECAUTIONARY STATEMENTS
Hazards to Humans & Domestic Animals
CAUTION

Harmful if swallowed, inhaled or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Remove contaminated clothing and wash clothing before reuse. Wash thoroughly with soap and water after handling.

Safety, health, and environmental regulations specific for the product in question.

CERCLA: This product is not subject to CERCLA release reporting. Many states have more stringent release reporting requirements. Report spills as required under federal, state and local regulations.

SARA Hazard Category (311/312): Not Hazardous

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EPA SARA 313: This product contains the following chemicals regulated under SARA Title III, section 313:

1,3-Benzenedicarbonitrile, 2,4,5,6-tetrachloro (Chlorothalonil) 1897-45-6 0.087%

EPA TSCA Inventory: All components of this product are listed on TSCA or exempt.

California Proposition 65: This product contains the following chemicals known to the state of California to cause cancer and/or reproductive harm: Chlorothalonil.

CANADA:

Canadian CEPA: All components are listed on the Canadian DSL or exempt.

Canadian WHMIS Classification: Not Classified

This product has been classified under the CPR and this SDS discloses information elements required by the CPR.

16. OTHER INFORMATION

NFPA Rating: Health = 1 Flammability = 0 Instability = 0
HMIS Rating: Health = 1 Flammability = 0 Physical Hazard = 0

SDS Revision History: New SDS

Date of preparation: September 11, 2014

NOTICE

This above information is believed to be correct but does not propose to be all inclusive and shall be used only as a guide. TechPac, LLC. shall not be held liable for any damage resulting from handling or from contact with the above product. This information relates only to the product designated herein and does not relate to its use in combination with any other material or process.