

1. IDENTIFICATION

Product name: **Quali-Pro® Chlorothalonil DF**
 Chemical name of active ingredient(s): Chlorothalonil: Tetrachloroisophthalonitrile
 Manufacturer: Makhteshim Agan of North America, Inc.
 4515 Falls of Neuse Road, Suite 300
 Raleigh, NC 27609
 Phone: 919-256-9300
 For fire, spill, and/or leak emergencies, contact Infotrac: Phone: 1-800-535-5053
 For medical emergencies and health and safety inquiries, contact Prosar: Phone: 1-877-250-9291

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMMON NAME	CAS NO.	%	OSHA PEL	ACGIH TLV	OTHER	NTP/IARC/OSHA (Carcinogen)
Chlorothalonil	1897-45-6	82.5	NE	NE	0.1 mg/m ³	IARC – 2B*

NE=not established

*IARC Group 2B: The agent is possibly carcinogenic to humans.

3. HAZARDS IDENTIFICATIONS

PHYSICAL PROPERTIES

Appearance: Brown powder

Odor: Slight

EMERGENCY OVERVIEW: WARNING. Causes substantial but temporary eye injury. Do not get in eyes or on clothing. May be fatal if inhaled. Do not breathe dust or spray mist. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. May be a potential skin sensitizer. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Do not get in eyes or on clothing. Avoid prolonged contact with skin. Do not take internally. Note to user: This product may produce mild bronchial irritation and temporary irritation of the skin characterized by redness or rash on exposed skin areas. Affected persons should consult a physician.

PRIMARY ROUTES OF EXPOSURE: Inhalation, ingestion, skin and eye contact.

SYMPTOMS OF ACUTE EXPOSURE: An extremely severe irritant to eyes. May cause skin irritation and contact dermatitis. Allergic skin reactions are possible. May cause irritation to the digestive tract following ingestion of large amounts.

HAZARDOUS DECOMPOSITION PRODUCTS: May decompose under fire conditions emitting gases and vapors (e.g., hydrogen), which may be toxic and irritating to the respiratory tract.

4. FIRST AID MEASURES

FIRST AID	
IF IN EYES:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15 to 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 INHALED:	<ul style="list-style-type: none"> • 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.
IF SWALLOWED:	<ul style="list-style-type: none"> • 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.
IF ON SKIN OR	<ul style="list-style-type: none"> • Take off contaminated clothing.

CLOTHING:

- Rinse skin immediately with plenty of water for 15 to 20 minutes.
- Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For medical emergencies involving this product, call Prozar at 1-877-250-9291.

NOTE TO PHYSICIAN: Persons having temporary irritation may respond to treatment with antihistamines or steroid creams and/or systemic steroids.

5. FIRE FIGHTING MEASURES

FLASH POINT: Not applicable

FLAMMABLE LIMITS: LFL/UFL: Not applicable

EXTINGUISHING MEDIA: Dry chemical, water spray, foam, CO₂.

HAZARDOUS DECOMPOSITION PRODUCTS: May decompose under fire conditions emitting gases and vapors (e.g., hydrogen), which may be toxic and irritating to the respiratory tract.

FIRE-FIGHTING PROCEDURES: If product is involved in a fire, wear positive-pressure, self-contained breathing apparatus and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

ACTION TO TAKE FOR SPILLS/LEAKS: This product is toxic to fish. Keep out of lakes, streams or ponds. Contain spill. Remove as much as possible by absorbing with inert material. Remove any contaminated soil. Place in closed, labeled containers and store in a safe place until disposed. Do not contaminate water while cleaning equipment or disposing of wastes. Persons performing this work should wear adequate personal protective equipment and clothing.

7. HANDLING AND STORAGE

Do not contaminate water, food or feed by storage or disposal.

PRECAUTIONS TO BE TAKEN IN HANDLING: Keep container closed to prevent spills and contamination. Carefully open containers. After partial use, replace lid and close tightly. Do not put concentrate or diluted product into food or drink containers.

PRECAUTIONS TO BE TAKEN IN STORAGE: Store in a cool place. Protect from excessive heat. Store product in original container only away from water, food, or feed.

STORAGE TEMPERATURE (MIN/MAX): Normal ambient temperatures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

EYE PROTECTION: Protective eyewear (e.g., chemical splash goggles or full-face shield).

SKIN PROTECTION: Long-sleeved shirt, long pants and shoes plus socks.

HAND PROTECTION: Chemical-resistant gloves, e.g., nitrile, neoprene.

RESPIRATOR REQUIREMENTS: Atmospheric levels should be maintained below the exposure guidelines. For most conditions, no respiratory protection should be needed; however, if handling without sufficient ventilation, use NIOSH-approved air-purifying respirator with N, P or R 95 class filter and an organic vapor cartridge.

ADDITIONAL PROTECTIVE MEASURES: Discarded clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS:

Users should:

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

EXPOSURE GUIDELINES: Refer to Section 2.

ENGINEERING CONTROLS: Refer to product label.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Brown powder

Odor: Slight

FLASH POINT: Not applicable

pH: 8.8

BOILING POINT: >662° F (>350° C)

SOLUBILITY IN H₂O: Dispersible

SPECIFIC GRAVITY: Not determined

VAPOR PRESSURE: 5.72 x 10⁻⁷ torr @ 25° C

BULK DENSITY: 0.662 g/mL @ 24° C

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal use and storage conditions.

MATERIALS TO AVOID: Avoid high alkaline conditions.

HAZARDOUS POLYMERIZATION: Not applicable

INSTABILITY CONDITIONS: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: May decompose under fire conditions emitting gases and vapors (e.g., hydrogen), which may be toxic and irritating to the respiratory tract.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY/IRRITATION STUDIES

Acute Oral LD50 (Rat):	No data available.
Acute Dermal LD50 (Rabbit):	No data available.
Acute Inhalation LC50 (Rat):	May be fatal if inhaled.
Eye Irritation:	Cause substantial but temporary eye injury.
Dermal Irritation:	May cause skin irritation.
Dermal Sensitization:	Potential skin sensitizer.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS: This product is toxic to aquatic invertebrates and wildlife. 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 may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash water or rinsate.

13. DISPOSAL CONSIDERATIONS

END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL RECOMMENDATIONS.

PRODUCT DISPOSAL: Do not contaminate water, food or feed by disposal. Improper disposal of excess pesticide, pesticide spray or rinsate is a violation of Federal law. Wastes resulting from the use of this product that cannot be used according to the label instructions or chemically reprocessed may be disposed on site or at a landfill or waste disposal facility approved for waste disposal, or in accordance with all applicable Federal, state, or local regulations.

CONTAINER DISPOSAL: Dispose of product containers, waste containers, and residues according to label instructions and local, state, and federal health and environmental regulations.

14. TRANSPORT INFORMATION

DOT CLASSIFICATION:

Not regulated

INTERNATIONAL TRANSPORTATION

IMO (vessel): UN 3077, Environmentally hazardous substances, solid, N.O.S. (chlorothalonil), 9, PGIII, Marine pollutant

IATA (air): Not regulated

15. REGULATORY INFORMATION

SARA TITLE III CLASSIFICATION:

Section 302: Not applicable.
Section 311/312: Acute health hazard (immediate)
Delayed health hazard (chronic)
Section 313: Chlorothalonil (82.5%) CAS# 1897-45-6

CA PROPOSITION 65: This product contains a chemical (chlorothalonil) that is known to the State of California to cause cancer.

CERCLA RQ: Not applicable

RCRA CLASSIFICATION: Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

TSCA STATUS: The ingredients of this product are listed on the TSCA inventory or are exempt.

16. OTHER INFORMATION

HAZARD RATINGS	NFPA	
HEALTH:	3	0 MINIMAL
FLAMMABILITY:	1	1 SLIGHT
REACTIVITY:	0	2 MODERATE
		3 HIGH
		4 SEVERE

MSDS DATE: 8-21-09. Superseded version dated 9-24-08, 11-29-07 and 10-31-07. Changes made to Sections 1, 3, 4, 7, 8, 13 and 14.

The information herein is given in good faith, but no warrant, express or implied, is made. Consult Makhteshim Agan of North America, Inc. for further information.