

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 12/21/2023

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Bonide Fung-onil Multi-Purpose Fungicide Concentrate

Product code : 6006394

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Fungicide

#### 1.3. Details of the supplier of the safety data sheet

Bonide Products, LLC 6301 Sutliff Road Oriskany, NY 13424

Telephone Number: (315) 736-8231

Comment: Bonide hours of operation are 8:00 a.m. to 4:30 p.m EST.

Website: <a href="www.bonide.com">www.bonide.com</a>
Email address: <a href="mailto:sales@bonide.com">sales@bonide.com</a>

1.4. Emergency telephone numbers (24 hour)

Medical : SafetyCall - (833) 972-1101

Spills : CHEMTREC - 1 (800) 424-9300 and/or 1 (703) 527-3887

#### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

#### Classification (GHS-US)

OSHA HCS (29 CFR 1910.1200) Acute Tox. 2; Eye Irrit. 2B; Carc. 2; STOT SE 3

#### 2.2. Label elements

## **GHS-US** labeling

Hazard pictograms (GHS-US)







Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : Fatal if inhaled (Aerosol). Causes eye irritation.

Suspected of causing cancer.

May cause respiratory irritation (Aerosol).

Precautionary statements (GHS-US) : Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe mist/vapours/spray.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

Wear respiratory protection.

Wash hands and exposed skin thoroughly after handling.

Contaminated work clothing should not be allowed out of the workplace. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. If breathing is laboured, administer

oxygen. Treat symptomatically.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

IF ON SKIN: Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. If irritation (redness, rash, blistering) develops, get medical attention. Treat symptomatically. Contaminated clothing should be laundered before reuse.

**IF** exposed or concerned: Get medical advice/attention. Treat symptomatically.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Disposal should be in accordance with local, state or national legislation. Consult

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an accredited waste disposal contractor or the local authority for advice. Observe directions on label and instructions for use. See Also Section 15.

#### 2.3. Other hazards

Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

Contains: Chlorothalonil. May produce an allergic reaction in persons already sensitized.

#### **SECTION 3: Composition/information on ingredients**

#### Mixture

Name	Product identifier	%
Chlorothalonil	(CAS No) 1897-45-6	29.6

<sup>\*</sup>Ingredients not listed or listed with a weight % range are considered a trade secret and are withheld under 29 CFR 1910.1200(i).

#### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

First-aid measures after inhalation

- : Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
- First-aid measures after skin contact
- : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash with plenty of soap and water. If irritation occurs and persists see a doctor. Wash contaminated clothing before reuse.
- First-aid measures after 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.
- First-aid measures after ingestion
- Call a poison control center or doctor immediately for treatment advice. Have affected person sip a glass of water if able to swallow. Do not induce vomiting unless told by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

#### 4.2. Most important symptoms and effects, both acute and delayed

Fatal if inhaled. Contains: Chlorothalonil. May produce an allergic reaction in persons already sensitized.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

Suitable extinguishing media : Use carbon dioxide, foam, dry chemical or water.

Unsuitable extinguishing media : None.

## 5.2. Special hazards arising from the substance or mixture

Combustion or thermal decomposition will evolve toxic and irritant vapours. Forms oxides of carbon and nitrogen, also chlorine and chlorinated compounds. Decontaminate equipment or materials used in pesticide fires.

Fire hazard : Not flammable.

Explosion hazard : None known.

Reactivity : None.

5.3. Advice for firefighters

Protection during firefighting

: Firefighter should wear full protective gear including self-contained breathing apparatus.

## **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid breathing vapors. Avoid skin as

: Avoid breathing vapors. Avoid skin and eye contact and wear appropriate personal protective equipment.

#### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters.

#### 6.3. Methods and material for containment and cleaning up

For containment : If possible, stop flow of product.

Methods for cleaning up : Contain and/or absorb spill with inert material, then place in suitable container. Dispose of waste

in accordance with local, state and federal regulations.

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## **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Precautions for safe handling

: Do not breathe mist/vapours/spray. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Wear respiratory protection. Wash hands and exposed skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Observe directions on label and instructions for use. See Also Section 15.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage temperature - Store at room temperature. Do not allow material to freeze. Incompatible materials - Strong oxidising agents. Substances that react with water.

## SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

None

#### 8.2. Exposure controls

Appropriate engineering controls : Local exhaust and general ventilation must be adequate to meet exposure standards.

Do  $\ensuremath{\text{NOT}}$  aerosolize or atomize to produce inhalable-size particles. Use low-pressure course

spray only. Observe directions on label and instructions for use.

Hand protection : Wear impervious gloves to minimize skin contact.

Eye protection : Chemical goggles or face shield.

Skin and body protection : Wear suitable working cloths.

Respiratory protection : Wear approved mask.

## **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Physical state : Viscous Liquid
Color : Medium beige
Odor : Slight.

Odor threshold : No data available pH : No data available

pH solution : 5.9

Relative evaporation rate (butyl acetate=1) : No data available Melting point : No data available Freezing point : -5 °C (23 °F) : 100 °C (212 °F) **Boiling point** : Not flammable Flash point : No data available Self ignition temperature Decomposition temperature No data available Flammability (solid, gas) See Flash point

Vapor pressure : 5.72 x 10-7 torr @ 25°C

Density (g/ml) : 1.179

Solubility : Water: 0.6 - 0.9 ppm.

Log Pow : No data available

Log Kow : No data available

Kinematic Viscosity (cSt) : 1918.6 @ 25°C

Explosive properties : Not applicable

Oxidizing properties : No apparent reaction was observed between the test substance and water, hexane, zinc metal,

and mono-ammonium phosphate. Oxidation occurs between potassium permanganate and this

product.

Explosive limits : Not applicable

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

None

#### 10.2. Chemical stability

The product is stable at normal handling and storage conditions.

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#### 10.3. Possibility of hazardous reactions

Will not occur.

10.4. Conditions to avoid

None.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

May decompose under fire conditions emitting gases and vapors which may be toxic and irritating to the respiratory tract.

## **SECTION 11: Toxicological information**

Exposure routes: Inhalation, Skin Contact, Eye Contact

#### 11.1. Information on toxicological effects

Acute toxicity : Oral: LD50 >4100 mg/kg-bw (rat)

Dermal: LD50 >2000 mg/kg-bw (rat) Inhalation: LC50 = 0.130 mg/L (rat)

Skin corrosion/irritation : Unlikely to cause skin irritation.

Serious eye damage/irritation : Product is expected to be slightly irritating. Irritation should clear in 7 days.

Respiratory or skin sensitization : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : Suspected of causing cancer.

Chlorothalonil (1897-45-6)		
IARC group	2B - Possibly Carcinogenic to Humans	
National Toxicity Program (NPT) Status	1	

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : May cause respiratory irritation.

Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard : Not classified

## **SECTION 12: Ecological information**

#### 12.1. Toxicity

Ecology - general : Toxic to fish and wildlife.

Chlorothalonil (1897-45-6)	ılorothalonil (1897-45-6)		
LC50 fish 1	0.012 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [semi-static])		
EC50 Daphnia 1	0.0342 - 0.143 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])		
EC50 other aquatic organisms 1	0.57 mg/l (Exposure time: 72 h - Species: Desmodesmus subspicatus)		
LC50 fish 2	0.0076 mg/l (Exposure time: 96 h Species: Oncorhynchus mykiss [flow-through])		
EC50 other aquatic organisms 2	0.0068 mg/l (Exposure time: 72 h - Species: Pseudokirchneriella subcapitata [static])		

## 12.2. Persistence and degradability

No additional information available

## 12.3. Bioaccumulative potential

Chlorothalonil (1897-45-6)		
Log Pow	2.9 (at 22 °C)	

#### 12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

## **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Waste disposal recommendations : Disposal should be in accordance with local, state or national legislation.

Consult an accredited waste disposal contractor or the local authority for

advice. Observe directions on label and instructions for use.

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	Land transport (U.S. DOT) *	Sea transport <u>(IMDG</u> )	Air transport (ICAO/IATA)	
UN number	Not classified as dangerous	UN 3082	UN 3082	
Proper Shipping Name	for transport. *	Environmentally hazardous substance, liquid, n.o.s. (Chlorothalonil)		
Transport hazard class(es)		9	9	
Packing group		III	III	
Hazard label(s)		Marine Pollutant	Marine Pollutant	
Environmental hazards		Yes	Yes	
Special precautions for user		None Assigned	None Assigned	

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable

#### **SECTION 15: Regulatory information**

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:

**WARNING:** May be fatal if inhaled. Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Do not breathe spray mist. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.

#### 15.1. US Federal regulations

Chlorothalonil (1897-45-6)		
Listed on United States TSCA (Toxic Substances Control Act) inventory Listed on SARA Section 313 (Specific toxic chemical listings)		
SARA Section 313 - Emission Reporting	0.1%	

## 15.2. US State regulations

Chlorothalonil (1897-45-6)	ılorothalonil (1897-45-6)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)	
Yes				41 ug/day	

## Chlorothalonil (1897-45-6)

U.S. - Massachusetts - Right to Know List

U.S. - Pennsylvania - RTK (Right to know) List

## **SECTION 16: Other information**

Other information : None.

SDS US (GHS HazCom 2012) - Pesticides

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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<sup>\*</sup> For bulk shipments in U.S., can be shipped as UN3082, Environmentally hazardous substance, liquid, n.o.s. (Chlorothalonil), 9, PG III