



Bonide Fung-onil Multi-Purpose Fungicide Concentrate

Safety Data Sheet

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

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, Inc.
6301 Sutliff Road
Oriskany, NY 13424
T (315) 736-8231
www.bonide.com

1.4. Emergency telephone number

Emergency number : 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)

Eye Dam. 1 H318
Skin Sens. 1 H317
Carc. 2 H351
STOT SE 3 H335
Aquatic Acute 1 H400
Aquatic Chronic 2 H411

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US)

: Danger

Hazard statements (GHS-US)

: H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H335 - May cause respiratory irritation
H351 - Suspected of causing cancer.
H400 - Very toxic to aquatic life
H411 - Very toxic to aquatic life with long lasting effects

Precautionary statements (GHS-US)

: P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P261 - Avoid breathing mist
P271 - Use only outdoors or in a well-ventilated area
P272 - Contaminated work clothing should not be allowed out of the workplace
P280 - Wear gloves/ protective clothing/ eye protection/ face protection
P273 - Avoid release to the environment
P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P308+P313 - IF exposed or concerned: Get medical advice/attention
P310 - Immediately call a POISON CENTER or doctor
P312 - Call a POISON CENTER/doctor if you feel unwell
P321 - Specific treatment (see label)
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P405 - Store locked up

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P391 - Collect spillage
P501 - Dispose of contents/container to in accordance with local/regional/national/international regulations

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

Mixture

Name	Product identifier	%	Classification (GHS-US)
Chlorothalonil	(CAS No) 1897-45-6	29.6	Not classified
Propylene glycol	(CAS No.) 57-55-6	<5	Not classified

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

No additional information available

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

- Fire hazard : Not flammable.
- Explosion hazard : None known.
- Reactivity : None.

5.3. Advice for firefighters

- Protection during firefighting : Firefighter should wear full protective gear.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : 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.

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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.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with eyes, skin and clothing. Do not eat drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container closed when not in use. Store in dry, cool, well-ventilated area.

7.3. Specific end use(s)

Fungicide

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Propylene glycol (57-55-6)

AIHA	AIHA TWA (mg/m ³)
	10 mg/m ³

8.2. Exposure controls

Appropriate engineering controls : Local exhaust and general ventilation must be adequate to meet exposure standards.
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 : Liquid
Color : Medium beige
Odor : Slight.
Odor threshold : No data available
pH : No data available
pH solution : 6 - 8
Relative evaporation rate (butyl acetate=1) : No data available
Melting point : No data available
Freezing point : -5 °C
Boiling point : 100 °C
Flash point : Not flammable
Self ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : See Flash point
Vapor pressure : 5.72 x 10⁻⁷ torr @ 25°C
Relative vapor density at 20 °C : 1.1929 g.ml
Relative density : No data available
Solubility : Water: 0.6 - 0.9 ppm.
Log Pow : No data available
Log Kow : No data available
Viscosity : 738.1 centistokes @ 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

9.2. Other information

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

None

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

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

11.1. Information on toxicological effects

Acute toxicity : Not classified

Chlorothalonil (1897-45-6)

LD50 oral rat	> 4100 mg/kg
LD50 dermal rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	0.13 mg/l (Exposure time: 1 h)

Propylene glycol (57-55-6)

LD50 Oral Rat	20 g/kg
LD50 Dermal Rabbit	20800 mg/kg

Skin corrosion/irritation : Not classified

pH: 6 - 8

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

pH: 6 - 8

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)

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])

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Propylene glycol (57-55-6)	
LC50 Fish 1	51600 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	10000 mg/l (Exposure time: 24 h - Species: Daphnia magna)
LC50 fish 2	41 - 47 ml/l (Exposure time: 96 h Species: Oncorhynchus mykiss [static])
EC50 Daphnia 2	10000 mg/l (Exposure time: 48 h - Species: Daphnia magna [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)
Propylene glycol (57-55-6)	
BCF fish 1	< 1
Log Pow	-0.92

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 : Dispose of contents/container in accordance with local/regional/national regulations.

SECTION 14: Transport information

DOT Classification – BY GROUND ONLY – this product must be shipped as:

Limited Quantity 

Per 49CFR

UN Number – 2902

Packaging Group – III

Proper Shipping Name – Environmentally Hazardous Substances, Liquid, N.O.S. (Chlorothalonil)

Class 9 – Miscellaneous Hazardous Materials 49 CFR 173.140

Other information : No supplementary information available.

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%

WARNING

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

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Propylene glycol (57-55-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag

Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

15.2. US State regulations

Chlorothalonil (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

Propylene glycol (57-55-6)

U.S. - New Jersey - Right to Know Hazardous Substance List

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

SECTION 16: Other information

Other information : None.

Full text of H-phrases: see section 16:

Acute Tox. 2 (Inhalation)	Acute toxicity (inhalation) Category 2
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Carc. 2	Carcinogenicity Category 2
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Skin Sens. 1	Skin sensitization Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H330	Fatal if inhaled
H335	May cause respiratory irritation
H351	Suspected of causing cancer
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

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.