



# 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](http://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) :



GHS05

GHS07

GHS08

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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## Safety Data Sheet

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

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.

# 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

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 <sup>3</sup> )	10 mg/m <sup>3</sup>
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### 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<sup>-7</sup> 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 centistrokes @ 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

# Bonide Fung-onil Multi-Purpose Fungicide Concentrate

## Safety Data Sheet

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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)
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#### 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:



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.*