



Bonide Citrus, Fruit & Nut Orchard Spray 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 Citrus, Fruit & Nut Orchard Spray Concentrate
Product code : 67702174

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

Use of the substance/mixture : Insecticide, Fungicide

1.3. Details of the supplier of the safety data sheet

Bonide Products, Inc.
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: www.bonide.com

Email address: sales@bonide.com

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)

| | |
|-----------------------------------|------|
| Flammable liquids Cat. 3 | H226 |
| Skin corrosion/irritation Cat. 2 | H315 |
| Eye irritation Cat. 2B | H320 |
| Acute toxicity, inhalation Cat. 4 | H332 |

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Warning

Hazard statements (GHS-US) :

H226 - Flammable liquid and vapor.
H315 - Causes skin irritation.
H320 - Causes eye irritation.
H332 - Harmful if inhaled

Precautionary statements (GHS-US) :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof equipment.
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P264 - Wash thoroughly after handling
P280 - Wear protective gloves/protecting clothing/eye protection
P281 - Use personal protective equipment as required
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P332 + P317 - If skin irritation occurs: Get medical help.
P305 + P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P317 - If eye irritation persists: Get medical help.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P370+P378 - In case of fire: Use Water fog, foam for extinction
P403 + P235 - Store in a dry place. Keep cool.

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P501 - Dispose of contents/container to in accordance with local and national regulations.

SECTION 3: Composition/information on ingredients

Mixture

| Name | Product identifier | % |
|------------|--------------------|------|
| Sulfur | (CAS No) 7704-34-9 | 10 |
| Pyrethrins | (CAS No) 8003-34-7 | 0.25 |

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Assure fresh air breathing. Allow the person to rest.
- First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

- Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

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 : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : No special precautions are necessary if used correctly.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in ambient temperature, well-ventilated place away from excessive heat.
Keep container closed when not in use. Keep away from incompatible materials.
- Incompatible products : Caustic agents

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Components with limited values that require monitoring at the workplace: Not required.

8.2. Exposure controls

| | |
|---------------------------------|--|
| Personal protective equipment | : Avoid all unnecessary exposure. Where extensive dermal exposure may be expected, either a chemical suit or a chemical apron will be needed. |
| Hand protection | : Wear protective gloves. |
| Eye protection | : Chemical goggles or safety glasses. |
| Respiratory protection | : In case of insufficient ventilation, wear suitable respiratory equipment. Follow the OSHA respirator regulations found in 26 CFR 1910.134. Use a NIOSH/MSHA approved respirator if exposure limits are exceeded or symptoms are experienced. |
| Other information | : Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly with soap and water after handling and before eating, or drinking. Safety shower and eye wash should be available close to work areas. |
| Environmental Exposure Controls | : Follow best practice for site management and disposal of waste. Avoid release to the environment. |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---------------------------|--|
| Physical state | : Liquid |
| Appearance | : Yellow, opaque suspension. |
| Color | : Light yellow. |
| Odor | : Sulfur and slight alcohol smell. |
| Odor threshold | : No data available |
| pH | : 4.25 ± 0.25 |
| Melting point | : No data available |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : 52°C |
| Self ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : Product is combustible |
| Relative density | : 1.04 ± 0.04 g/mL |
| Solubility | : Soluble in water. |
| Viscosity | : 450 ± 200 cPs (Brookfield LVF) |
| Explosive properties | : Product does not present an explosion hazard |
| Water Solubility | : Emulsifiable |

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Stable under normal temperatures and conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known.

10.4. Conditions to avoid

Exposure to excessive heat.

10.5. Incompatible materials

Caustic agents.

10.6. Hazardous decomposition products

Carbon oxides may form upon burning.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : LD50 (oral) (rat) > 5000 mg/kg; LD50 (dermal) > 5000 mg/kg

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Routes of Entry

Skin: Causes skin irritation.
Eyes: Causes eye irritation.
Ingestion: None identified.
Inhalation: Harmful if inhaled.

Carcinogenic Categories

IARC (International Agency for Research on Cancer): Substance is not listed
NTP (National Toxicology Program): Substance is not listed

SECTION 12: Ecological information

12.1. Toxicity

No further relevant information available

12.2. Persistence and degradability

No further relevant information available

12.3. Bioaccumulative potential

No further relevant information available

12.4. Mobility in soil

No further relevant information available

12.5. Other adverse effects

No studies have been found

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

DOT Classification: Not regulated by US DOT Highway regulations.
U.S. Surface Freight Classification: NMFC item 155050, LTL Class: 70 Insecticide
UN Number: 1993 Flammable liquid, n.o.s. (Isopropanol)
IMDG Class (sea): 3 – Flammable liquid
IATA Class (air): 3 – Flammable liquid
Marine Pollutant: No
Packing Group: III
Hazard Label(s): 3 – Flammable liquid
ADR Class (road): Not regulated.
Proper Shipping Name(s): Pesticide, liquid, flammable
Reportable Quantity: None

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:

CAUTION:

Causes moderate eye irritation.

15.1. US Federal regulations

Safety, Health, and Environmental Regulations/Legislation Specific for the Substance or Mixture
SARA: N/A
Section 355 (Extremely Hazardous Substance): Substance is not listed.
Section 313 (Specific Toxic Chemical Listings): Substance is not listed.
TSCA (Toxic Substance Control Act): Substance is not listed.

15.3. US State regulations

Proposition 65
Chemicals Known to Cause Cancer: Substance is not listed.
Chemicals Known to Cause Reproductive Toxicity for Females: Substance is not listed.
Chemicals Known to Cause Reproductive Toxicity for Males: Substance is not listed.
Chemicals Known to Cause Developmental Toxicity: Substance is not listed.
National Regulations: Substance is not listed.
State Right to Know: Substance is not listed.

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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.