



Bonide Rot-Stop Tomato Blossom End Rot 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 Rot-Stop Tomato Blossom End Rot Concentrate
Product code : 166

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

Use of the substance/mixture : Fertilizer

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: 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)

Skin corrosion/irritation 3 H316
Eye damage/irritation 2B H320

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) : No symbol
Signal word (GHS-US) : Warning
Hazard statements (GHS-US) : H316 - May cause mild skin irritation
H320 - Causes eye irritation
Precautionary statements (GHS-US) : P264 - Wash thoroughly after handling.
P305 + P351 + P338 - IF IN EYES - Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
P337 + P317 - If eye irritation persists: Get medical help.
P332+P317 - If skin irritation occurs: Get medical help.

SECTION 3: Composition/information on ingredients

Mixture

Name	Product identifier	%
Calcium chloride	(CAS No) 10043-52-4	9.2

Notes: Potassium chloride (CAS No 7447-40-7) and sodium chloride (CAS No 7647-14-5) are impurities from the naturally-occurring source material, brine solution.

Synonyms: Calcium Dichloride, Calcium Chloride Aqueous Solution, Liquid Calcium Chloride, Calcium Chloride

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 : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

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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

Fire Hazard: This material does not burn.

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

Formed under fire conditions: hydrogen chloride gas, calcium oxide

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire.

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.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Store away from other materials.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Remove contaminated clothing immediately.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Protect from atmospheric moisture. Keep containers closed when not in use. Keep separated from incompatible substances.

Incompatibilities/ Materials to Avoid : Avoid contact with: bromide trifluoride, 2-furan percarboxylic acid because calcium chloride is incompatible with those substances. Contact with zinc forms flammable hydrogen gas, which can be explosive. Catalyzes exothermic polymerization of methyl vinyl ether. May release flammable hydrogen gas. Reaction of bromide impurity with oxidizing materials may generate trace levels of impurities such as bromates.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Respiratory protection : Wear approved mask.

Other information : Use good personal hygiene. Do not consume or store food in the work area. Wash hands and affected skin immediately after handling, before smoking or eating, before breaks, and at the end of the workday.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Opaque liquid.
Color	: Colourless to white.
Odor	: Characteristic.
pH	: 7
Melting point	: No data available
Freezing point	: Non-flammable
Boiling point	: No data available
Flash point	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative density	: 1.01
Solubility	: Soluble in water.

SECTION 10: Stability and reactivity

10.1. Reactivity

Hygroscopic.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Extremely high or low temperatures.

10.5. Incompatible materials

Avoid contact with: bromide trifluoride, 2-furan percarboxylic acid because calcium chloride is incompatible with those substances. Contact with zinc forms flammable hydrogen gas, which can be explosive. Catalyzes exothermic polymerization of methyl vinyl ether. May release flammable hydrogen gas. Reaction of bromide impurity with oxidizing materials may generate trace levels of impurities such as bromates.

10.6. Hazardous decomposition products

Formed under fire conditions: hydrogen chloride gas, calcium oxide

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : May cause eye and skin irritation.

Calcium chloride (10043-52-4)	
LD50 oral rat	> 1000 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; 2301 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	> 5000 mg/kg body weight (Rabbit; Experimental value; Other)
LC50 inhalation rat (mg/l)	> 0.16 mg/l/4h (Rat; Literature study)

Skin corrosion/irritation	: May cause skinn irritation.
Serious eye damage/irritation	: May cause eye irritation
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

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SECTION 12: Ecological information

12.1. Toxicity

Calcium chloride (10043-52-4)	
LC50 fish 1	13400 mg/l (96 h; Gambusia affinis; Lethal)
EC50 Daphnia 1	144 mg/l (48 h; Daphnia magna)
LC50 fish 2	10650 mg/l (96 h; Lepomis macrochirus)
EC50 Daphnia 2	383 mg/l (48 h; Daphnia magna)
TLM fish 1	2400 ppm (48 h; Pisces)
Threshold limit algae 1	3130 mg/l (120 h; Diatomeae)
Threshold limit algae 2	27000 mg/l (72 h; Selenastrum capricornutum; GLP)

12.2. Persistence and degradability

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Persistence and degradability	Not established.

Calcium chloride (10043-52-4)	
Persistence and degradability	Biodegradability: not applicable. No (test) data on mobility of the substance available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.

Calcium chloride (10043-52-4)	
Bioaccumulative potential	Bioaccumulation: not applicable.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : Avoid release to the environment.

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

Not regulated for transport by DOT.

SECTION 15: Regulatory information

15.1. US Federal regulations

No additional information available

15.3. US State regulations

No additional information available

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.