



# Bonide Annual Grub Beater Insect Control with Systemaxx

## 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

Substance name : Bonide Annual Grub Beater Insect Control with Systemaxx  
Product code : 538831994

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

Use of the substance/mixture : Insecticide

#### 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](http://www.bonide.com)

Email address: [sales@bonide.com](mailto: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

##### GHS-US classification

Acute toxicity, oral 5	H303	
Acute Toxicity, dermal 5	H313	
Eye Irritation 2B	H320	
Specific Target Organ Toxicity (STOT) single exposure, Respiratory tract irritation 3		H335
Carcinogenicity 2		H351
Specific Target Organ Toxicity (STOT) repeat exposure 2		H373
Aquatic Environment, Acute 1	H400	

#### 2.2. Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Warning

Hazard statements (GHS-US) :

H303 - May be harmful if swallowed  
H313 - May be harmful if in contact with skin  
H320 - Causes eye irritation  
H335 - May cause respiratory irritation  
H351 - Suspected of causing cancer (inhalation)  
H373 - May cause damage to lungs through prolonged or repeated exposure  
H400 - Very toxic to aquatic life

Precautionary statements (GHS-US) :

P261 - Avoid breathing dust.  
P264 - Wash thoroughly after handling.  
P271 - Use only outdoors or in a well-ventilated area.  
P273 - Avoid release to the environment.  
P301+P317 - If swallowed: Get medical help.  
P302+P352 - If on skin: Get medical help.  
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing  
P317 - 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.  
P391 - Collect spillage.  
P501 - Dispose of contents/container to in accordance with local/national regulations.

# Bonide Annual Grub Beater Insect Control with Systemaxx

## Safety Data Sheet

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

### 2.3. Other hazards

Avoid creating dust when handling, using or storing. Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

## SECTION 3: Composition/information on ingredients

### Mixture

Name	Product identifier (CAS No)	%
Imidacloprid (ISO),	138261-41-3	0.5
Calcium Carbonate	471-34-1	< 96*
Silica	14808-60-7	< 1*

\*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 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.
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. Sand.
Unsuitable extinguishing media	: Do not use water stream.

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

Can burn in fire, releasing irritating and toxic gases due to thermal decomposition or combustion.

### 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.
Hazardous Combustion Products	: Crystalline silica exists in several forms, the most common of which is quartz. If crystalline silica (quartz) is heated to more than 870°C, it can change to a form of crystalline silica known as trydimite, and if crystalline silica (quartz) is heated to more than 1470°C, it can change to a form of crystalline silica known as cristobalite. The OSHA PEL for crystalline silica as trydimite and cristobalite is one-half of the OSHA PEL for crystalline silica (quartz).

## 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.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Highly toxic to bees, birds and aquatic invertebrates.

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

Methods for cleaning up : Clean up spills immediately and avoid creating dust cloud. Vacuum or sweep up material and place in a container for reuse or disposal. Reduce airborne dust and prevent scattering by moistening with water. Pick up wash liquid with additional absorbent and place in a disposable container.

# Bonide Annual Grub Beater Insect Control with Systemaxx

## Safety Data Sheet

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

### 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. Protect from moisture. Avoid prolonged and repeated contact with skin. Use only in a well-ventilated area. Minimize dust generation and accumulation.  
KEEP OUT OF REACH OF CHILDREN!

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

Storage conditions : Store in original container in a cool, dry place, out of the reach of children, preferably a locked storage cabinet.  
Incompatible products : Strong bases. Strong acids.  
Incompatible materials : Sources of ignition.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Proper ventilation is required when handling or using this product. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

For substances listed in Section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

Silica (14808-60-7)		
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	0.025 mg/m <sup>3</sup> (respirable particulate matter)
USA ACGIH	ACGIH chemical category	A2 - Suspected Human Carcinogen
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	50 µg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	0.05 mg/m <sup>3</sup> (respirable dust)
USA IDLH	US IDLH (mg/m <sup>3</sup> )	50 mg/m <sup>3</sup> (respirable dust)

Calcium Carbonate (471-34-1)		
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (total dust) 5 mg/m <sup>3</sup> (respirable dust)

\* Limestone is not a carcinogen listed by ACGIH, MSHA, OHSA, NTP, DFG, RSST, or IARC. However, crystalline silica may be at or above detection levels (0.1%). Occurrence is dependent upon the stone source, process and specific application.

#### 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 : Wear gloves made of waterproof material. Discard clothing and other absorbent materials that have been heavily contaminated with this product. Do not reuse them. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet..

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state : Solid  
Appearance : Tan to gray granule powder.  
Color : Tan to grey  
Odor : No appreciable odor.  
Odor threshold : No data available  
pH : 7.0 - 8.0  
Melting point : No data available  
Freezing point : No data available  
Boiling point : No data available  
Flash point : No data available  
Self ignition temperature : No data available  
Decomposition temperature : No data available  
Flammability (solid, gas) : No data available

# Bonide Annual Grub Beater Insect Control with Systemaxx

## Safety Data Sheet

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

Vapor pressure	: 5.2x10 <sup>-6</sup> Pa @ 25°C (Imidacloprid)
Solubility	: Insoluble in water.
Log Pow	: 0.57 @ 25°C (Imidacloprid)
Log Kow	: No data available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Not reactive

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

Product will not undergo polymerization.

#### 10.4. Conditions to avoid

Avoid temperatures above 100°F (38°C) for prolonged period of time. Moisture.

#### 10.5. Incompatible materials

Not available.

#### 10.6. Hazardous decomposition products

Hydrogen chloride and hydrogen cyanide and oxides of nitrogen and carbon.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity	: Oral LD50 (rat) - > 5,000 mg/Kg Dermal LD50 (rat) - > 2,000 mg/Kg Inhalation LC50 (rat) - > 5.0 mg/L Eye Irritation (rabbit) - Mild Skin Irritation (rabbit) - Mild Sensitization (guinea pig) - Non-sensitizer
Skin corrosion/irritation	: Mild irritation
Serious eye damage/irritation	: Mild irritation
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Little or no evidence of mutagenic effects during in vivo or in vitro studies.
Carcinogenicity	: Not classified
Reproductive toxicity	: No reproductive or teratogenic (birth defect) effects at normal exposure levels
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

#### Information on toxicological effects (Limestone)

Skin corrosion/irritation	: Direct contact may cause irritation by mechanical abrasion.
Serious eye damage/irritation	: Direct contact with dust may cause irritation by mechanical abrasion or corrosive action. Conjunctivitis may occur.
Respiratory or skin sensitization	: Dust may irritate nose, throat, mucous membranes and respiratory tract by mechanical abrasion. Coughing, sneezing, chest pain, shortness of breath, inflammation of mucous membrane, and flu-like fever may occur following exposures in excess of appropriate exposure limits. Inhalation of excessive concentrations of dust, including this material, may lead to lung injury.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Limestone (calcium carbonate) is not a carcinogen. May cause cancer (Inhalation).
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: May cause respiratory irritation.
Specific target organ toxicity (repeated exposure)	: Causes damage to organs (respiratory system) through prolonged or repeated exposure (Inhalation).
Aspiration hazard	: Not classified

# Bonide Annual Grub Beater Insect Control with Systemaxx

## Safety Data Sheet

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

Symptoms/Injuries After Inhalation	: Respiratory irritation. Repeated or prolonged exposure to respirable (airborne) crystalline silica dust will cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever, and weight loss.
Symptoms/Injuries After Skin Contact	: Prolonged exposure may cause skin irritation.
Symptoms/Injuries After Eye Contact	: May cause slight irritation to eyes.
Symptoms/Injuries After Ingestion	: Ingestion may cause adverse effects
Chronic Symptoms	: May cause cancer. Causes damage to organs through prolonged or repeated exposure.

### LD50 and LC50 Data:

Silica (14808-60-7)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rat	> 5000 mg/kg
Calcium Carbonate (471-34-1)	
LD50 Oral Rat	6450 mg/kg

Silica (14808-60-7), IARC Group 1, National Toxicology Program (NTP) Status Known Human Carcinogens.  
OSHA Hazard Communication Carcinogen List - In OSHA Hazard Communication Carcinogen list

## SECTION 12: Ecological information

### 12.1. Toxicity

This product is toxic to birds and aquatic invertebrates. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply directly to water. Do not contaminate water when cleaning equipment or disposing of equipment washwater.

### 12.2. Persistence and degradability

Imidacloprid has a soil ½ life of 29 - 225 days depending on soil type and conditions. It is soluble in water and has the potential to leach in permeable soil types.

### 12.3. Bioaccumulative potential

Not established.

### 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

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 - Harmful if swallowed or absorbed through skin. Causes eye irritation. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling.

## SECTION 16: Other information

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.*