



# Bonide DuraTurf Insect & Grub Control

## 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 DuraTurf Insect & Grub Control  
Product code : 538832304

#### 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

##### Classification (GHS-US)

Acute toxicity, oral 4	H302
Eye Damage/Irritation 2B	H320
Specific Target Organ Toxicity - Single Exposure 3	H335
Carcinogenicity 2	H351
Hazardous to Aquatic Environment, Acute 2	H401

#### 2.2. Label elements

##### GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Warning

Hazard statements (GHS-US) :

H302 – Harmful if swallowed  
H320 – Causes eye irritation  
H335 – May cause respiratory irritation.  
H351 – Suspected of causing cancer.(inhalation)  
H401 – Toxic to aquatic life

Precautionary statements (GHS-US) :

P203 – Obtain, read and follow all safety instructions before use.  
P261 – Avoid breathing dust.  
P264 – Wash exposed skin thoroughly after handling.  
P270 – Do not eat, drink or smoke when using this product.  
P271 - Use only outdoors or in a well-ventilated area.  
P273 – Avoid release to the environment.  
P280 – Wear protective clothing, protective gloves, mask and eye protection.  
P318 – If exposed or concerned, get medical advice.  
P301+P317+P330 – If SWALLOWED: Rinse mouth. Get medical help.  
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.  
P337+P317 – If eye irritation persists: Get medical advice.  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.  
P405 – Store locked up.  
P501 – Dispose of contents/container to in accordance with local and national regulations.

#### 2.3. Other hazards

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

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### SECTION 3: Composition/information on ingredients

#### Mixture

Name	Product identifier (CAS No)	%	Classification (GHS-US)
Imidacloprid (ISO),	138261-41-3	0.5	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Lambda-cyhalothrin	91465-08-6	0.1	Acute Tox. 3 (Oral), H301 Acute Tox. 4 (Dermal), H312 Acute Tox. 2 (Inhalation:dust,mist), H330 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Crystalline Silica	14808-60-7	<0.5	Carcinogenic

### 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.
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#### 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. 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.
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##### 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	: On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.
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### 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.

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

Storage conditions : Protect from moisture. Keep container closed when not in use. Store in original container.  
Incompatible products : Strong bases. Strong acids.  
Incompatible materials : Sources of ignition.

### 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 : When using, do not eat, drink or smoke.

### SECTION 9: Physical and chemical properties

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

Physical state : Solid  
Appearance : Greyish-brown granular  
Color : Greyish-brown  
Odor : Minimal, if any  
Odor threshold : No data available  
pH : 9.64  
Relative evaporation rate (butyl acetate=1) : No data available  
Flash point : Not applicable  
Self ignition temperature : No data available  
Decomposition temperature : No data available  
Vapor pressure : No data available  
Density : 67.890 lbs/cu. Ft. (pour) ; 72.853 lbs/cu. Ft. (tap)  
Solubility : Insoluble in water.

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No additional information available

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

Not established.

#### 10.4. Conditions to avoid

Moisture. Extremely high or low temperatures.

#### 10.5. Incompatible materials

Strong acids. Strong bases.

#### 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/IRRITATION STUDIES:

Acute Oral LD50 (Rat): > 5,000 mg/kg  
Acute Dermal LD50 (Rabbit): > 5,000 mg/kg  
Acute Inhalation LC50 (Rat): > 2.02 mg/L

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Eye Irritation: Mildly irritating  
Skin Irritation: Non-irritating  
Dermal Sensitization: Not a skin sensitizer

### REPRODUCTIVE/DEVELOPMENTAL EFFECTS:

Lambda-cyhalothrin : Not a developmental or reproductive toxicant.

Imidacloprid: In a two-generation reproduction study in rats, imidacloprid was not a primary reproductive toxicant. Offspring exhibited reduced body weights at the high dose and in conjunction with maternal toxicity. In developmental toxicity studies in rats and rabbits, there was no evidence of an embryotoxic or teratogenic potential for imidacloprid. In both species, developmental effects were observed only at high doses and in conjunction with maternal toxicity.

### CHRONIC/SUBCHRONIC TOXICITY STUDIES:

Lambda-cyhalothrin technical: Reversible paresthesia (abnormal skin sensation). Reversible clinical signs of neurotoxicity in mammals.

Imidacloprid: In chronic dietary studies in rats and dogs exposed to imidacloprid, the target organs were the thyroids and/or liver.

### CARCINOGENICITY:

Lambda-cyhalothrin technical: No treatment-related tumors in rats or mice.

Imidacloprid: In oncogenicity studies in rats and mice, imidacloprid was not considered carcinogenic in either species.

### NEUROTOXICITY:

Neurotoxicity studies in rats showed slight behavioral and activity changes only at the highest dose tested. There were no correlating morphological changes observed in the neural tissues.

### MUTAGENICITY:

The imidacloprid mutagenicity studies, taken collectively, demonstrate that the active ingredient is not genotoxic or mutagenic.

### OTHER TOXICITY INFORMATION:

Lambda-cyhalothrin: In humans, contact with exposed skin may result in temporary itching, tingling, burning or numbness, called paresthesia. The effect may result from splash, aerosol, or hot vapor contact, or transfer to the face from contaminated gloves and hands. The symptoms normally disappear within 24 hours. Face and genital areas are especially susceptible to this effect. Paresthesia involving the face is also known as "subjective facial sensation" or SFS.

Crystalline silica (quartz) component is classified as a carcinogen by NTP and IARC.

### TARGET ORGANS:

Lambda-cyhalothrin technical: Liver, nervous system

## SECTION 12: Ecological information

### ENVIRONMENTAL HAZARDS:

This product is toxic to fish and aquatic vertebrates. Do not apply directly to water.

### ECO-ACUTE TOXICITY:

Data based on Lambda-cyhalothrin technical:

Fish (trout) LC50/EC50 : 0.00024 ppm

Fish (bluegill) LC50/EC50 : 0.00021 ppm

Bird (Bobwhite quail) 8-day dietary LC50/EC50: >5300 ppm

Bird (Mallard duck) 8-day dietary LC50/EC50: >3948 ppm

Bees LC50/EC50: 0.038 ug/bee

Invertebrates (water flea) LC50/EC50: 0.00036 ppm

Data based on Imidacloprid Technical:

LC50 (96h) Rainbow Trout: 211 mg/L

LD50 Bobwhite Quail: 152 mg/kg

EC50 (48h) Daphnia magna: 85 mg/L

EC50 (72h) Algae: > 10 mg/L

Bee LD50: 0.008 ug/bee

### ENVIRONMENTAL FATE:

Lambda-cyhalothrin technical: Not persistent in soil or water, Immobile in soil. Sinks in water after 24 hours.

Imidacloprid Technical: Hydrolysis half-life of Imidacloprid is greater than 30 days at pH 7 and 25°C. The aqueous photolysis half-life is less than 3 hours. The soil surface photolysis of Imidacloprid has a half-life of 39 days, and in soil, the half-life ranged from 26 to 229 days.

## 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.

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### 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:** Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Wear long-sleeved shirt and long pants, socks, shoes, and gloves. Food utensils such as spoons or measuring cups must not be used for food purposes after use in measuring pesticides.

### 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.*