Bonide Grass Beater Over-the-Top Grass Killer 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 Grass Beater Over-the-Top Grass Killer Concentrate
Product code : 7969884

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

Use of the substance/mixture : Herbicide

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

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)
Acute Tox. 4 (Dermal) H312
Carc. 1B H350

2.2. Label elements

GHS-US labeling
Hazard pictograms (GHS-US) : 

Signal word (GHS-US) : Danger
Hazard statements (GHS-US) : H312 - Harmful in contact with skin
H350 - May cause cancer.
Precautionary statements (GHS-US) : P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P280 - Wear gloves/eye protection
P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P308+P313 - IF exposed or concerned: Get medical advice/attention
P312 - Call a POISON CENTER/doctor/physician if you feel unwell
P321 - Specific treatment (see first aid on this label)
P362+P364 - Take off contaminated clothing and wash it before reuse
P405 - Store locked up
P501 - Dispose of contents/container to in accordance with local/national regulations

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sethoxydim</td>
<td>(CAS No) 74051-80-2</td>
<td>13</td>
<td>Not classified</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>(CAS No) 91-20-3</td>
<td>0.98</td>
<td>Acute Tox. 4 (Oral), H302 Carc. 1B, H350</td>
</tr>
</tbody>
</table>
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. Immediately call a POISON CENTER or doctor/physician. Wash with plenty of soap and water. Wash contaminated clothing before reuse.

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: May cause cancer.

Symptoms/injuries after skin contact: Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful in contact with skin.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media


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.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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. Provide good ventilation in process area to prevent formation of vapor. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in original container. Keep container closed when not in use. Heat sources.

Incompatible products: Strong bases. Strong acids.

Incompatible materials: Sources of ignition.
7.3. Specific end use(s)
No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Naphthalene (91-20-3)

<table>
<thead>
<tr>
<th></th>
<th>USA ACGIH</th>
<th>ACGIH TWA (ppm)</th>
<th>10 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>USA ACGIH</td>
<td>ACGIH STEL (ppm)</td>
<td>10 ppm</td>
</tr>
</tbody>
</table>

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: Liquid
Appearance: Amber liquid.
Color: Amber.
Odor: Mild aromatic.
Odor threshold: No data available
pH: 3.2
Relative evaporation rate (butyl acetate=1): No data available
Melting point: No data available
Freezing point: No data available
Boiling point: 204 °C
Flash point: 165 °F
Self ignition temperature: 746.6 °F
Decomposition temperature: No data available
Flammability (solid, gas): No data available
Vapor pressure: No data available
Relative vapor density at 20 °C: No data available
Relative density: No data available
Relative density of saturated gas/air mixture: 0.91
Solubility: Emulsifiable.
Log Pow: No data available
Log Kow: No data available
Viscosity, kinematic: No data available
Viscosity, dynamic: No data available
Explosive properties: No data available
Oxidizing properties: No data available
Explosive limits: No data available

9.2. Other information
No additional information available

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
Extremely high or low temperatures.

10.5. Incompatible materials
Strong acids. Strong bases.

10.6. Hazardous decomposition products
Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity: Harmful in contact with skin.

**Naphthalene (91-20-3)**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>1100 mg/kg (Rat)</td>
</tr>
<tr>
<td>LD50 dermal rat</td>
<td>&gt; 2500 mg/kg (Rat)</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt; 20000 mg/kg (Rabbit)</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>pH</td>
<td>3.2</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>pH</td>
<td>3.2</td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
<td>Not classified</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>May cause cancer.</td>
</tr>
</tbody>
</table>

**Naphthalene (91-20-3)**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC group</td>
<td>2B - Possibly Carcinogenic to Humans</td>
</tr>
<tr>
<td>National Toxicology Program (NTP) Status</td>
<td>3 - Reasonably anticipated to be Human Carcinogen</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Specific target organ toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>(single exposure)</td>
<td></td>
</tr>
<tr>
<td>Specific target organ toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>(repeated exposure)</td>
<td></td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Not classified</td>
</tr>
<tr>
<td>Potential Adverse human health effects and symptoms</td>
<td>Based on available data, the classification criteria are not met. Harmful in contact with skin.</td>
</tr>
<tr>
<td>Symptoms/injuries after skin contact</td>
<td>Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful in contact with skin.</td>
</tr>
</tbody>
</table>

SECTION 12: Ecological information

12.1. Toxicity

**Naphthalene (91-20-3)**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
<td>1.99 mg/l (96 h; Pimephales promelas)</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
<td>2.16 mg/l (48 h; Daphnia magna)</td>
</tr>
<tr>
<td>EC50 other aquatic organisms 1</td>
<td>2.96 mg/l (4 h; Selenastrum capricornutum)</td>
</tr>
<tr>
<td>LC50 fish 2</td>
<td>0.11 mg/l (96 h; Oncorhynchus mykiss)</td>
</tr>
<tr>
<td>TLM fish 1</td>
<td>150 mg/l (96 h; Lepomis macrochirus; Cool water)</td>
</tr>
<tr>
<td>TLM fish 2</td>
<td>1.24 ppm (96 h; Oncorhynchus gorbuscha)</td>
</tr>
<tr>
<td>Threshold limit algae 1</td>
<td>0.4 mg/l (72 h; Skeletonema costatum; Growth rate)</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

**Bonide Grass Beater Over-the-Top Grass Killer Concentrate**

Persistance and degradability: Not established.
Naphthalene (91-20-3)

Persistence and degradability

Biochemical oxygen demand (BOD)
0 g O²/g substance

Chemical oxygen demand (COD)
0.22 g O²/g substance

ThOD
2.99 g O²/g substance

BOD (% of ThOD)
0 % ThOD

12.3. Bioaccumulative potential

Bonide Grass Beater Over-the-Top Grass Killer Concentrate

Bioaccumulative potential
Not established.

Naphthalene (91-20-3)

BCF fish 1
23 - 168 (Cyprinus carpio; Test duration: 8 weeks)

BCF fish 2
40 - 300 (672 h; Oncorhynchus mykiss)

BCF other aquatic organisms 1
331 (360 h; Ostreidae)

BCF other aquatic organisms 2
130 (24 h; Chlorella sp.)

Log Pow
3.30 (Experimental value)

Bioaccumulative potential
Low potential for bioaccumulation (BCF < 500).}

12.4. Mobility in soil

Naphthalene (91-20-3)

Surface tension
0.03 N/m (100 °C)

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

In accordance with DOT
No dangerous good in sense of transport regulations

Additional 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:

CAUTION: Causes moderate eye injury. Harmful if swallowed or absorbed through the skin. Avoid contact with skin, eyes, or clothing.

15.1. US Federal regulations

15.2. International regulations

15.2.2. National regulations

Naphthalene (91-20-3)

Listed on IARC (International Agency for Research on Cancer)
Listed as carcinogen on NTP (National Toxicology Program)

15.3. US State regulations

Naphthalene (91-20-3)

U.S. - California - Proposition 65 - Carcinogens List

U.S. - California - Proposition 65 - Developmental Toxicity

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

No significance risk level (NSRL)
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Naphthalene (91-20-3)

<table>
<thead>
<tr>
<th>Female</th>
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<tbody>
<tr>
<td>Yes</td>
</tr>
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</table>

Naphthalene (91-20-3)

U.S. - Massachusetts - Right To Know List
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:

<table>
<thead>
<tr>
<th>H302</th>
<th>Harmful if swallowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>H312</td>
<td>Harmful in contact with skin</td>
</tr>
<tr>
<td>H350</td>
<td>May cause cancer</td>
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</tbody>
</table>

Acute Tox. 4 (Dermal) Acute toxicity (dermal) Category 4
Acute Tox. 4 (Oral) Acute toxicity (oral) Category 4
Carc. 1B Carcinogenicity Category 1B

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.