Bonide Stump-Out Stump & Vine Killer
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 Stump-Out Stump & Vine Killer
Product code : 538832164

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)
Skin Irritation 2  H315
Eye Damage 1  H318

2.2. Label elements
GHS-US labeling
Hazard pictograms (GHS-US) :

Signal word (GHS-US) : Danger
Hazard statements (GHS-US) : H315 - Causes skin irritation
H318 - Causes serious eye damage
Precautionary statements (GHS-US) :
P264 - Wash hands thoroughly after handling.
P280 - Wear gloves/eye protection/face protection/protecting clothing
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338 - IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321 - Specific treatment (see first aid section on this label).
P332+P317 - IF skin irritation occurs: Get medical help
P362+P364 - Take off contaminated clothing and wash before reuse

SECTION 3: Composition/information on ingredients

Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triclopyr</td>
<td>(CAS No) 57213-69-1</td>
<td>8.8</td>
</tr>
<tr>
<td>Triethylamine</td>
<td>(CAS No) 121-44-8</td>
<td>3.23</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 : Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Wash with soap and see a physician. Get medical advice/attention.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
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 after skin contact: Causes skin irritation.
Symptoms/injuries after eye contact: Causes serious eye damage.

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

Treatment based on judgement of the physician in response to reaction of the patient.

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. 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: 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.
Hygiene measures: Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Triethylamine (121-44-8)</th>
<th>USA ACGIH</th>
<th>ACGIH TWA (ppm)</th>
<th>1 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>USA ACGIH</td>
<td>ACGIH STEL (ppm)</td>
<td>1 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.
Skin and body protection: Wear suitable protective clothing.
Bonide Stump-Out Stump & Vine Killer
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Gold-yellow liquid.</td>
</tr>
<tr>
<td>Color</td>
<td>Gold-yellow.</td>
</tr>
<tr>
<td>Odor</td>
<td>Ammonia-like.</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>7.5 - 8.5 @ 20 ºC</td>
</tr>
<tr>
<td>Relative evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>212 ºF (100 ºC)</td>
</tr>
<tr>
<td>Flash point</td>
<td>200 ºF (93.333 ºC) (TCC)</td>
</tr>
<tr>
<td>Self ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>2.266 kPa/17 mm Hg @ 20 ºC</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.04 - 1.06</td>
</tr>
<tr>
<td>Solubility</td>
<td>Emulsifies</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.05 g/mL @ 20 ºC</td>
</tr>
</tbody>
</table>

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
Oxidizing agent.

10.6. Hazardous decomposition products
Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Triethylamine (121-44-8)

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>&gt; 460 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value; 730 mg/kg bodyweight; Rat)</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>416 mg/kg (Rabbit; Experimental value; Equivalent or similar to OECD 402; 580 mg/kg bodyweight; Rabbit)</td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
<td>&gt; 4.2 mg/l/4h (Rat)</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation : Causes skin irritation. pH: 7.5 - 8.5

Serious eye damage/irritation : Causes serious eye damage. pH: 7.5 - 8.5

Respiratory or skin sensitization : Not classified

Revision date: 01/21/2020
EN (English US)
Bonide Stump-Out Stump & Vine Killer
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>Property</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
<td>Not classified</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.</td>
</tr>
<tr>
<td>Symptoms/injuries after skin contact</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>Symptoms/injuries after eye contact</td>
<td>Causes serious eye damage.</td>
</tr>
</tbody>
</table>

### SECTION 12: Ecological information

#### 12.1. Toxicity

**Triethylamine (121-44-8)**

- LC50 fish 1: 43.7 mg/l (96 h; Pimephales promelas; GLP)
- EC50 Daphnia 1: 200 mg/l (48 h; Daphnia magna; Inhibitory)
- LC50 fish 2: 330 mg/l (96 h; Poecilia reticulata)
- Threshold limit other aquatic organisms 1: < 85 mg/l (Bacteria; Toxicity test)
- Threshold limit algae 1: 1 mg/l (96 h; Scenedesmus quadricauda; Inhibitory)
- Threshold limit algae 2: > 1 mg/l (Scenedesmus quadricauda)

**Triclopyr (57213-69-1)**

- LC50 fish 1: 893 mg/l 96-hour; Bluegill
- EC50 Daphnia 1: 947 mg/l 48 hour; Daphnia
- LC50 fish 2: 613 mg/l 96-hour; Rainbow Trout

#### 12.2. Persistence and degradability

**Bonide Stump-Out Stump & Vine Killer**

- Persistence and degradability: Not established.

**Triethylamine (121-44-8)**

- Persistence and degradability: Readily biodegradable in water. Low potential for adsorption in soil. Photodegradation in the air.
- Biochemical oxygen demand (BOD): < 0.001 g O²/g substance
- Chemical oxygen demand (COD): 1.020 g O²/g substance

#### 12.3. Bioaccumulative potential

**Bonide Stump-Out Stump & Vine Killer**

- Bioaccumulative potential: Not established.

**Triethylamine (121-44-8)**

- BCF fish 1: < 0.5 (42 days; Cyprinus carpio)
- BCF other aquatic organisms 1: 7.45 (QSAR)
- Log Pow: 1.45 (Experimental value; Other)
- Bioaccumulative potential: Low potential for bioaccumulation (BCF < 500).

#### 12.4. Mobility in soil

**Triethylamine (121-44-8)**

- Surface tension: 0.021 N/m (20 °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.

Revision date: 01/21/2020 EN (English US)
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. 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, long pants, chemical resistant gloves made of any waterproof material, and shoes and socks when applying this product.

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.