SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Product name: Summit Biological Caterpillar & Webworm Control
EPA reg. No.: 70051-106-6218
Product Type: Liquid Concentrate
Active Ingredient: Bacillus thuringensis subspecies kurstaki strain SA-12
CAS No.: 68038-71-1

1.2. Relevant identified uses of the substance or mixture and uses advised against
Identified uses: Biological Insecticide
Uses advised against: Any use not listed on the label.

1.3. Details of the supplier of the safety data sheet
Name: Summit Chemical Company
Address: 235 S. Kresson Street
Baltimore, Maryland 21224
U.S.A.
Phone Number: +01 (800) 227-8664
Website: http://www.summitchemical.com

1.4. Emergency telephone number
Emergency number: +1 800 255-3924

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Hazard Classification: Not classified by OSHA
EPA Signal Word: Caution (see section 15)
Hazard Statements: None
Pictogram: None
Precautionary Statements: Causes moderate eye irritation. Avoid contact with eyes or clothing. Avoid breathing vapors or spray mist. Wash thoroughly with soap and water after handling.

2.2 Other Hazards: To protect the environment do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when no rain is predicted for the next 24 hours will help ensure that wind or rain will not blow or wash pesticide off the treatment area. Rinsing application equipment over the treatment area will help avoid run off to water bodies or drainage systems.
SECTION 3: Composition/information on ingredients

3.1 Substance composition

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS #</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Bacillus thuringiensis</em> subspecies <em>kurstaki</em> technical liquid</td>
<td>68038-71-1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EPA Reg.# 70051-68</td>
<td>98.35</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

4.1. Description of first aid measures

Generic measures: Have the product container or label with you when calling a poison control center or doctor or going for treatment.

Eye Contact: Hold eye open and rinse slowly and gently for 15-20 minutes. Remove contact lenses if present after the first 5 minutes, then continue rinsing. Call poison control center or doctor for treatment advice.

4.2. Most important symptoms and effects, both acute and delayed

None specified

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

None specified

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media: None specified
Unsuitable Extinguishing Media: None specified

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products: None known

5.3. Advice for firefighters

Protection of Firefighters: None specified

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: None specified
6.2. Environmental precautions

To protect the environment do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters.

6.3. Methods and material for containment and cleaning up

Methods for Containment: For small spills soak up with pet liter or similar absorbent material place into a sealed container and dispose of according to Federal State and local law.

6.4. Reference to other sections

See Section 8 for occupational exposure limits and risk management measures. Refer to Section 13 for disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Causes moderate eye irritation. Avoid contact with eyes or clothing. Avoid breathing vapors or spray mist. Wash thoroughly with soap and water after handling.

7.2. Conditions for safe storage, including any incompatibilities

Keep out of reach of children. Store in a cool dry place. Activity may be impaired by storage at temperatures above 90°F.

7.3. Specific end use(s)

Rinsing application equipment over the treatment area will help avoid run off to water bodies or drainage systems.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

OSHA Permissible Exposure Limits (PELs): Not determined

ACGIH Threshold Limit Values: Not determined

Other Exposure Limits: Not determined

8.2. Exposure controls

Engineering Controls: None specified

Personal Protective Equipment: None specified

Eye/face Protection: None specified

Skin Protection: None specified

Hand Protection: None specified
SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance: Brown liquid
Odour: Yeasty
Odour Threshold: Not determined
pH: 4.4-5.5
Melting Point / Freezing Point: Not determined
Initial Boiling Point: Not determined
Boiling Range: Not determined
Flash Point: Not determined
Evaporation Rate: Not determined
Flammability (solid, gas): Not applicable
Lower & Upper Flammability Limits: Not applicable
Vapour Pressure: Not determined
Vapour Density: Not determined
Density: 8.4 lb./gal.
Solubility: Not determined
Partition Coefficient (n-octanol/water): Not determined
Auto-ignition Temperature: Not determined
Decomposition Temperature: Not determined
Viscosity: Not determined
Explosive Properties: None known
Oxidising Properties: None known

9.2. Other information

Not available.
10.1. Reactivity
Not reactive

10.2. Chemical stability
Stable

10.3. Possibility of hazardous reactions
None known

10.4. Conditions to avoid
None known

10.5. Incompatible materials
None known

10.6. Hazardous decomposition products
None known

SECTION 11: Toxicological

11.1. Information on toxicological effects

Acute Toxicity

Toxicological information on the substance or mixture:

LD₅₀ (oral) No toxicity or infectivity, Toxicity Category IV
LD₅₀ (dermal) No toxicity observed, Toxicity Category IV
LC₅₀ (inhalation) No toxicity or infectivity, Toxicity Category IV

Skin corrosion / irritation: Slightly irritating
Eye irritation: Mildly irritating
Respiratory or skin sensitization: Not required.

Other information on adverse health effects:

Carcinogenicity
NTP Listed: Not applicable
IARC Listed: Not applicable
OSHA: Not applicable

11.2 Reference to other sections
See Section 4 for symptoms and acute and delayed effects.

SECTION 12: Ecological information

12.1. Toxicity

<table>
<thead>
<tr>
<th>Test species</th>
<th>Test method</th>
<th>Test substance</th>
<th>LC₅₀</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Bobwhite</td>
<td>5 day</td>
<td>Similar Btk strain (AI)</td>
<td>LC₅₀ &gt; 3.86 x 10⁸ CFU/kg body weight</td>
</tr>
</tbody>
</table>
### 12. Persistence and degradability

*Bacillus thuringiensis* subspecies *kurstaki* (Btk) shows a rapid loss of activity in response to UV light.

### 12.3. Bioaccumulative potential

Btk is not pathogenic and does not reproduce in living organisms other than target Lepidopteran larvae.

### 12.4. Mobility in soil

Low based on scientific data for Btk.

### 12.5. Other adverse effects

No data available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal Instructions:**

_Pesticide Storage:_ Store in a cool place. Activity may be impaired by storage at temperatures above 90°F.

_Pesticide Disposal and Container Handling:_

Non-refillable container. Do not reuse or refill this container.

_for containers less than or equal to 5 gallons-

If empty: Place in trash or offer for recycling.
If partly filled: Call your local solid waste agency for disposal instructions. Never place any unused product down any indoor or outdoor drain.

_for containers greater than 5 gallons-

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip the container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Repeat this procedure two more times. Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.
SECTION 14: Transportation information

14.1. UN number
Not regulated.

14.2. UN proper shipping name
Not regulated.

14.3. Transport hazard class(es)
Not regulated.

14.4. Packing group
Not regulated.

14.5. Environmental hazards
Not regulated.

14.6. Special precautions for user
Not regulated.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not regulated.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EPA: This product is a pesticide product registered by the United States 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 (SDS), and for workplace labels of non-pesticidal chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

CAUTION, KEEP OUT OF REACH OF CHILDREN
Causes moderate eye irritation.

OSHA: N/A
TSCA Status: Exempt
CERCLA Reportable Quantity: N/A
SARA Title III:
  Section 302: N/A
  Section 311/312: N/A
  Section 313: N/A
RCRA Status: N/A

SECTION 16: Other information

Disclaimer:
The best of our knowledge, the information contained herein is accurate. However, neither Summit nor any of its subsidiaries assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All material may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

SDS Authoring Information:

Revision date: March 23, 2015
Date of Previous version: July 2, 2013
SDS Prepared by: Summit Chemical Company