Approved List of Materials

All materials listed are approved for use by both the United States Environmental Protection Agency and the California Department of Pesticide Regulations can be used on the site in accordance with the Label and SDS Sheet located in the Clark Pest Control Binder.

No pesticide will be stored on site. All surplus pesticide are removed and disposed off site in accordance with Clark Pest Control. The above list will be updated as new materials are approved for use on the site.

Any Changes to the Approved List of Materials must have prior facility management approval.

When the EPA# listed has two alpha characters behind it please note that is used by the State of California for Pesticide reporting and tracking.

<table>
<thead>
<tr>
<th>Material</th>
<th>EPA#</th>
<th>Act.Ingr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Advion Ant Gel</td>
<td>100-1498-AA</td>
<td>Indoxacarb</td>
</tr>
<tr>
<td>2 Arilon</td>
<td>100-1501-AA</td>
<td>Indoxacarb</td>
</tr>
<tr>
<td>3 Detex Blox</td>
<td>Exempt</td>
<td>N/A</td>
</tr>
<tr>
<td>4 Optimate</td>
<td>67760-104-AA-53883</td>
<td>Gamma Cyhalothrin</td>
</tr>
</tbody>
</table>

Attention: Electronic forms of labels/SDS listed may also be found at:

www.clarkpest.com
- Commercial Pest Control
- Approved Materials

Facility Rep
Date

Clark Pest Control
Date
Insecticide
FOR USE IN RESIDENTIAL, INSTITUTIONAL, COMMERCIAL, AND INDUSTRIAL AREAS
Use sites include single and multi-family residential buildings, schools, commercial and industrial facilities (including warehouses, apartments, supermarkets, restaurants, motels, hotels, hospitals, zoos, food handling/storage establishments), and transportation equipment such as aircraft, trains, ships, boats, buses.
KEEP OUT OF REACH OF CHILDREN
CAUTION/ PRECAUCIÓN
Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)
DO NOT TREAT AREAS THAT ARE EASILY ACCESSIBLE TO CHILDREN AND PETS
Active Ingredient:
Indoxacarb*: (S)-methyl 7-chloro-2,5-dihydro-2-[(methoxy carbonyl) [4(trifluoromethoxy) phenoxy](amino) carbonyl]inden[1,2-e] [1,3,4]oxadiazine-4a-(3H) carboxylate . . . . . . . . . . . 0.05%
Other Ingredients 99.95%
Total: 100.00%
*Indoxacarb belongs to the oxadiazine chemical class.
EPA Reg. No. 100-1498
EPA Est. 54455-IL-001ABV
EPA Est. 65335-R1-001SEP
(Superscript is first three letters of batch code on container)
Product of USA
SCP 1498A-L1A 0414
4038829
4 x 1.06 oz. (30g) syringes
Net Weight
Non-refillable Container
SCP 130-1498A-L1A
Advion® Ant Gel

**FIRST AID**
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

**HOT LINE NUMBER**
For 24-Hour Medical Emergency Assistance
(Human or Animal) Or Chemical Emergency Assistance
(Spill, Leak, Fire or Accident) Call 1-800-888-8372

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

CAUTION: Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

**Environmental Hazards**
Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark.

**Physical and Chemical Hazards**
Do not use this product in or on electrical equipment where a possibility of shock hazard exists.

**DIRECTIONS FOR USE**

It is a violation of federal law to use this product in a manner inconsistent with its labeling.

**PRODUCT INFORMATION**

Advion® Ant Gel is specifically formulated to be attractive to all major pest species of ants such as Acrobat, Argentine, Big-headed, Carpenter, Cornfield, Crazy, Field, Ghost, Harvester*, Honey, Little black, Odorous house, Pavement, Pharaoh*, Pyramid, Red Imported Fire Ant*, Rover, Thief, and White-footed. Advion Ant Gel contains the active ingredient, indoxacarb, a non-repellent insecticide. Use of Advion Ant Gel will help eliminate ants within days of applying the gel according to the use directions.

* Advion Ant Gel is effective at killing Pharaoh ants, foraging red imported fire ants and harvester ants. For complete control of outdoor nests of these species, use additional treatments labeled for outdoor nest control of these species.

**Use Instructions and Precautions:**

1. Advion Ant Gel can be used indoors or outdoors applied as a crack and crevice or spot treatment in single and multi-family residential homes, institutional, commercial and industrial facilities (including schools, warehouses, apartments, supermarkets, restaurants, motels, hotels, hospitals, nursing homes, offices, zoos, retail establishments, food handling/storage establishments), transportation equipment such as aircraft, trains, ships, boats, and buses, and other similar sites where ant infestations are a problem.
2. Avoid applying Advion Ant Gel to surfaces recently treated with residual sprays.
3. Surfaces treated with Advion Ant Gel should not be treated with residual sprays.
4. Inspect applications periodically for consumption/activity and apply additional bait as needed.
5. Do not apply to surfaces that food contacts.
6. Do not allow open foods to contact gel material.
7. Refillable Bait Stations: Advion Ant Gel may be used in commercially available refillable bait stations designed for interior and/or exterior perimeter insect pest control. If the refillable bait station is not equipped with a sticker to identify the contents, apply a sticker either on the interior or exterior of the device. For best results, position refillable bait stations near ant trails, nest sites, or where ants are known to actively forage. Regularly inspect each refillable bait stations and replace with Advion Ant Gel as needed for continual control of ants.

**Treatment Rates for All Uses**

- Apply Advion Ant Gel as spots of gel or small lines of gel.
- Placements of spots or lines of Advion Ant Gel should be to active foraging trails, nest sites, or to areas known to be active.
- Apply 0.1 to 1.0 gram spots of Advion Ant Gel or approximately 1/4" in diameter spots.
- Apply lines of Advion Ant Gel of approximately 1/8" wide and 2" long; up to 3" long for highly active foraging trails.
- Apply as many placements of Advion Ant Gel as possible to active foraging areas without disrupting the natural foraging behavior of ants.
- If Advion Ant Gel is used in refillable bait stations apply an amount of the Advion Ant Gel that does not exceed the capacity of the refillable bait station's bait reservoir.

**Examples of Advion Ant Gel Placement Amounts**

| Figure 1: Line of gel approx. 1/8” x 2” |
| Figure 2: Spot of gel approx. 0.1g |
| Figure 3: Spot of gel approx. 1g |
Indoor Use Directions
• Inspect infested areas carefully to determine overall infestation levels, locations of foraging, nesting areas, and most appropriate application points.
• Indoor applications include cracks and crevices along walls or floors, behind or under equipment or appliances, under tables, within framing of tables or furniture, around sinks, within or near garbage collection areas, attics, crawl spaces, and cracks and crevices in cabinets.
• Inspect Advion Ant Gel placements periodically for consumption or attractiveness and reapply as needed.

Applications in Nonfood/Nonfeed Handling Areas
Advion Ant Gel is designed for use as a spot or crack and crevice treatment to control ants in residential structures and the non-food/non-feed areas of commercial, industrial, public and institutional buildings/structures, including restaurants, warehouses, food processing plants, supermarkets, hospitals, nursing homes, motels, hotels, schools, laboratories, computer facilities, aircraft, buses, boats/ships, trains, pet shops and zoos.
Nonfood/non-feed areas include areas such as garbage rooms, lavatories, floor drains (to sewers), entries, and vestibules, offices, locker rooms, machine rooms, boiler rooms, garages, mop closets and storage (after bottling or canning). Refer to section below for use directions and restrictions when making applications in food/feed handling areas of Food/Feed Handling Establishments.

Applications in Food/Feed Handling Areas
Application to food/feed areas of food/feed handling establishments may only be made as a crack and crevice treatment. Apply Advion Ant Gel directly into cracks and crevices by placing the bait dispenser tip approximately 1/2 inch into cracks, crevices, holes and similar openings where ants are found or are entering. Food and feed handling areas include areas for receiving, storage, packing (canning, bottling, wrapping, boxing), preparing, edible waste storage, and enclosed processing systems (mills, dairies, edible oils, syrups). Serving areas are also considered a food/feed area when food is exposed and facility is in operation.
• Do not apply Advion Ant Gel to areas where food/feed, food utensils or food processing surfaces may come into contact and become contaminated.
• Do not apply Advion Ant Gel to areas that are routinely washed such as cracks and crevices in tops of tables, food/feed preparation and prepared food holding surfaces as bait could be removed by the washing.
• Do not apply Advion Ant Gel to surfaces where the temperature exceeds 120-130°F because this could cause the bait to liquefy and lose effectiveness.
Examples include, but are not limited to, parts of stoves, ovens, grills, fume hoods, saunas, heat lamps, coffee urns, steam tables, toasters, fryers, dishwashers, and hot water pipes.
• Use good application practice to avoid movement of Advion Ant Gel to exposed surfaces used for food preparation.
If Advion Ant Gel contacts an exposed surface, first remove as much of the gel bait as possible, then wash with soap and water.

Outdoor Use Directions:
• A thorough inspection around a structure may reveal areas where ants are gaining access to the structure. Attempts should be made to remove the access.
• Apply Advion Ant Gel as a spot or thin bead (see above) to pest entry sites such as along windows, doors, between construction elements, sewer areas, adjacent trees which harbor ants, along walls, garbage holding areas, or suitable placement site acting as an ant harborage.
• Make Advion Ant Gel placements to reduce the potential of subsequent human contact.
• Inspect Advion Ant Gel placements periodically and apply fresh ant gel as needed.
• High temperatures may affect the consistency of the gel after placement, so inspect to determine if additional gel is needed.

STORAGE AND DISPOSAL
Do not contaminate water, food or feed by storage and disposal.

Pesticide Storage
Store in cool, dry place inaccessible to children and pets.

Pesticide Disposal
Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Container Disposal
Nonrefillable Container: Do not reuse or refill this container. Offer for recycling if available. Place empty bait dispensers in trash. If partially filled, wrap in newspaper and discard in trash or call your local solid waste authority for disposal instructions.
NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and of Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

Advion®, the ALLIANCE FRAME the SYNGENTA Logo and the PURPOSE ICON are Trademarks of a Syngenta Group Company

©2014 Syngenta

For non-emergency (e.g., current product information), call Syngenta Crop Protection at 1-800-334-9481.

Manufactured for:
Syngenta Crop Protection, LLC
P.O. Box 18300
Greensboro, North Carolina 27419-8300
SCP 1498A-L1A 0414
4038829
## 1. PRODUCT IDENTIFICATION

Product identifier on label: ADVION ANT GEL  
Product No.: A20377A  
Use: Insecticide  
Manufacturer: Syngenta Crop Protection, LLC  
Post Office Box 18300  
Greensboro NC 27419  
Manufacturer Phone: 1-800-334-9481  
Emergency Phone: 1-800-888-8372

## 2. HAZARDS IDENTIFICATION

Classifications: Not Applicable  
Signal Word (OSHA): Not Applicable  
Hazard Statements: Not Applicable

Precautionary Statements: Not Applicable  
Other Hazard Statements: None

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Common Name</th>
<th>CAS Number</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other inert ingredients</td>
<td>Other inert ingredients</td>
<td>Trade Secret</td>
<td>99.95%</td>
</tr>
<tr>
<td>methyl (4aS)-7-chloro-2,5-dihydro-2-[(methoxycarbonyl)[4-(trifluoromethoxy)phenyl]amino]carbonyl]indeno[1,2-e][1,3,4]oxadiazine-4a(3H)-carboxylate</td>
<td>Indoxacarb Technical</td>
<td>173584-44-6</td>
<td>0.05%</td>
</tr>
</tbody>
</table>

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.
4. FIRST AID MEASURES

Have the product container, label or Safety Data Sheet with you when calling Syngenta (800-888-8372), a poison control center or doctor, or going for treatment.

Ingestion: If swallowed: First aid measures are not normally required. If you feel unwell or have concerns, contact Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

Eye Contact: If in eyes: Rinse eyes with water. First aid measures are not normally required. If concerned, call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

Skin Contact: If on skin or clothing: First aid measures are not normally required. Wash material from the skin. If concerned, call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

Inhalation: If inhaled: First aid measures are not normally required. If you feel unwell or have concerns, contact Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:
Use dry chemical, foam or CO2 extinguishing media. If water is used to fight fire, dike and collect runoff.

Specific Hazards:
During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

Special protective equipment and precautions for firefighters:
Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures:
Follow exposure controls/personal protection outlined in Section 8.

Methods and materials for containment and cleaning up:
Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

7. HANDLING AND STORAGE

Precautions for safe handling:
Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Conditions for safe storage, including any incompatibilities:
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR
THE MANUFACTURE, FORMULATION AND PACKAGING OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Occupational Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>Other</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other inert ingredients</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Indoxacarb Technical</td>
<td>Not Established</td>
<td>Not Established</td>
<td>1 mg/m³ 8hr &amp; 12hr TWA (respirable)</td>
<td>Manufacturer</td>
</tr>
</tbody>
</table>

Appropriate engineering controls:
Use effective engineering controls to comply with occupational exposure limits (if applicable).

Individual protection measures:

Ingestion:
Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Eye Contact:
Where eye contact is likely use dust-proof chemical goggles.

Skin Contact:
Where contact is likely, wear chemical-resistant gloves (such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyvinyl chloride [PVC] or Viton), coveralls, socks and chemical-resistant footwear.

Inhalation:
A respirator is not normally required when handling this substance.

In case of emergency spills, use a NIOSH approved respirator with any N, R, P or HE filter.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Off-white, opaque gel
Odor: Very faint
Odor Threshold: Not Available
pH: 7.2 (1% solution in H2O)
Melting point/freezing point: Not Available
Initial boiling point and boiling range: Not Available
Flash Point (Test Method): Not Available
Flammable Limits (% in Air): Not Available
Flammability: Not Available
Vapor Pressure: Indoxacarb Technical Not Available
Vapor Density: Not Available
Relative Density: 1.15 - 1.24 g/ml @ ca.185°F (85°C)
10. STABILITY AND REACTIVITY

Reactivity: Not reactive.
Chemical stability: Stable under normal use and storage conditions.
Possibility of hazardous reactions: Will not occur.
Conditions to Avoid: Not Available
Incompatible materials: None known.
Hazardous Decomposition Products: Not Available

11. TOXICOLOGICAL INFORMATION

Health effects information
Likely routes of exposure: Dermal, Inhalation
Symptoms of exposure: Not Applicable
Delayed, immediate and chronic effects of exposure: Not Applicable

Numerical measures of toxicity (acute toxicity/irritation studies (finished product))

- Ingestion: Oral (LD50 Female Rat) : > 5000 mg/kg body weight
- Dermal: Dermal (LD50 Rat) : > 5000 mg/kg body weight
- Inhalation: Inhalation (LC50 Rat) : > 5.5 mg/l 4 hrs (applies to technical dry material)

Eye Contact: Non-Irritating (Rabbit)
Skin Contact: Non-Irritating (Rabbit)
Skin Sensitization: Not a Sensitizer (Mouse)

Reproductive/Developmental Effects
Indoxacarb Technical: Animal testing showed effects on reproduction at levels equal to or above those causing parental toxicity.
Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.
Chronic/Subchronic Toxicity Studies

Indoxacarb Technical: The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions.
- Inhalation; rat: Incoordination, mortality, red blood cell destruction causing abnormal decrease in number of red blood cells (anemia)

Carcinogenicity

Indoxacarb Technical: Animal testing did not show any carcinogenic effects.
- Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
- Did not cause genetic damage in animals.

Toxicity of Other Components

None

Other Toxicity Information

Not Applicable

Target Organs

Active Ingredients
- Nervous system
Inert Ingredients
- Not Applicable

Other inert ingredients

Methyl (4aS)-7-chloro-2,5-dihydro-2-[[methoxycarbonyl][4-(trifluoromethoxy)phenyl]amino]carbonyl]indeno[1,2-e][1,3,4]oxadiazine-4a(3H)-carboxylate

Other inert ingredients

No

12. ECOLOGICAL INFORMATION

Eco-Acute Toxicity

Indoxacarb Technical:
- Fish (Rainbow Trout) 96-hour LC50 0.65 mg/l
- Bird (Bobwhite Quail) LD50 Oral 98 mg/kg
- Invertebrate (Water Flea) Daphnia Magna 48-hour EC50 0.60 mg/l

Environmental Fate

Indoxacarb Technical:
- Information given is based on data on the components and the ecotoxicology of similar products.
- Environmental Hazards: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark.

13. DISPOSAL CONSIDERATIONS

Disposal:

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.
ADVION ANT GEL

Date: 8/4/2015
Replaces: 3/18/2014

Characteristic Waste: Not Applicable
Listed Waste: Not Applicable

14. TRANSPORT INFORMATION

DOT Classification
   Ground Transport - NAFTA
   Not regulated

Comments
   Water Transport - International
   Not regulated

   Air Transport
   Not regulated

15. REGULATORY INFORMATION

Pesticide Registration:

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: Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

EPA Registration Number(s):
100-1498

EPCRA SARA Title III Classification:
   Section 311/312 Hazard Classes: Acute Health Hazard
   Section 313 Toxic Chemicals: None

California Proposition 65:
   Not Applicable

CERCLA/SARA 304 Reportable Quantity (RQ):
   Not Applicable

RCRA Hazardous Waste Classification (40 CFR 261):
   Not Applicable

TSCA Status:
   Exempt from TSCA, subject to FIFRA

16. OTHER INFORMATION
The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.
Insecticide

For use in and around single and multi-family residential buildings; schools; institutional, commercial, and industrial facilities (including warehouses, apartments, supermarkets, restaurants, motels, hotels, hospitals, daycares, and food-handling/storage/processing establishments); and transportation equipment, such as aircraft, trains, ships, boats, and buses

Active Ingredient:
Indoxacarb*
(S)-methyl 7-chloro-2,5-dihydro-2-[[methoxy-carbonyl][4(trifluoromethoxy)phenyl]amino]-carbonyl]indeno[1,2-e][1,3,4]oxadiazine-4a-(3H)-carboxylate: . . . . . . . . . . . . . . . . . . 20.0%

Other Ingredients: 80.0%
Total: 100.0%

*Indoxacarb belongs to the oxadiazine chemical class. Arilon® is a water-dispersible granule (WG) that contains 0.2 lb indoxacarb per lb product.

KEEP OUT OF REACH OF CHILDREN
CAUTION/PRECAUCIÓN
Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

EPA Reg. No. 100-1501
EPA Est. No. 67545-AZ-1
Product of USA
Formulated in the USA
SCP 1501A-L4B 1015

8.25 ounces
Net Contents

GROUP 22 INSECTICIDE

FIRST AID

If swallowed
• Call a poison control center or doctor immediately for treatment advice.
• Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or a doctor.
• Do not give anything by mouth to an unconscious person.

If in eyes
• Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
• Call a poison control center or doctor for treatment advice.

If on skin or clothing
• Remove contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.
• Call a poison control center or doctor for treatment advice.

If inhaled
• Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.
• Call a poison control center or doctor for treatment advice.

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

HOT LINE NUMBER
For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals
CAUTION
Harmful if swallowed. Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Harmful if inhaled. Avoid breathing (dust, vapor or spray mist). Remove contaminated clothing and wash clothing before reuse.

Personal Protective Equipment (PPE)
All pesticide handlers (mixers, loaders and applicators) must wear:
• Shirt and long pants
• Waterproof gloves
• Shoes plus socks

Follow manufacturer’s instructions for cleaning/maintaining personal protective equipment (PPE). If no such instructions for washables are available, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations
Users Should:
• Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
• Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
• Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

continued...
Environmental Hazards

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment rinse water. Do not apply where/when conditions could favor runoff. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Read entire label before using this product. Syngenta will not be responsible for losses or damages resulting from use of this product in any manner not specifically stated on this label or other labels or bulletins published by Syngenta. User assumes all risks associated with such non-specified use.

PRODUCT INFORMATION

Arlon is a water-dispersible granule concentrate that contains the non-repellent active ingredient indoxacarb. When applied following label directions, Arilon is effective at controlling a wide range of listed insect pests common in urban environments.

After dilution in water, Arilon forms a suspension for making applications. Arilon is formulated to not stain or damage building surfaces where water applied alone causes no damage. It is still recommended that before a first application is made, treat a small area and allow it to dry to determine whether staining will occur.

Ants

Ants contacting hard surfaces recently treated with Arilon (or fresh deposits) may transfer lethal doses to other (untreated) ants.

Brief or limited exposures to fresh Arilon deposits on porous or non-porous surfaces (or across a wide range of surfaces) are still effective at killing ants.

Flies

Arlon applied to hard surfaces (i.e., non-porous or indieo type environments) is effective at controlling house flies and fruit flies.

Resistance Management

Arlon is a Group 22 Insecticide that contains the active ingredient indoxacarb. Due to the inherent risk of the development of resistance to any pesticide product, it is strongly advised that Arilon be used in a sound resistance-management program. Treatment may not be effective against labeled pests if Arilon-tolerant strains develop.

It is recommended to follow the following resistance-management practices that may include, but are not limited to:

- Rotating Arilon with products with different modes of action;
- Avoiding treatment of successive generations with Arilon;
- Using labeled rates at specified spray intervals.

For additional information about implementing these or other resistance management practices, consult your local Extension Specialist or Syngenta representative.

USE RESTRICTIONS AND PRECAUTIONS

- DO NOT formulate this product into other end-use products without written permission of Syngenta.
- Chemigation: DO NOT apply this product through any type of irrigation system.
- DO NOT apply this product in commercial nurseries and greenhouses or on sod farms. Not for use on plants being grown for sale or other commercial use, or for commercial seed production.
- Keep people and pets away from treated areas until treatment has dried.

- DO NOT apply a broadcast or general surface application to interior surfaces of residential or commercial structures.
- DO NOT apply this product to pets or edible crops.
- DO NOT use water-based sprays of Arilon in or on electrical equipment or outlets due to possible shock hazard.
- At residential sites, all food-processing surfaces and utensils in the treatment area must be covered during treatment or thoroughly washed before reuse.
- DO NOT apply this product in patient rooms or in any rooms being occupied including rooms occupied by the elderly or infirm.
- DO NOT apply to classrooms when in use.
- DO NOT apply to institutions (e.g., libraries and recreational facilities) when occupants are present in the immediate area/room being treated.
- DO NOT clean equipment near wells, water sources or desirable vegetation. Dispose of waste rinse water in accordance with local regulations.
- For outdoor applications in California, refer to Table 2.

APPLICATION MIXING DIRECTIONS

**TABLE 1: Dilution Chart for Arilon:**

<table>
<thead>
<tr>
<th>Volume (gallons) of Water to Use</th>
<th>Desired End Use Application Rate</th>
<th>Amount of Arilon needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.05%</td>
<td>0.33 oz</td>
</tr>
<tr>
<td></td>
<td>0.10%</td>
<td>0.66 oz</td>
</tr>
<tr>
<td>3</td>
<td>0.05%</td>
<td>1.0 oz</td>
</tr>
<tr>
<td></td>
<td>0.10%</td>
<td>2.0 oz</td>
</tr>
<tr>
<td>5</td>
<td>0.05%</td>
<td>1.7 oz</td>
</tr>
<tr>
<td></td>
<td>0.10%</td>
<td>3.3 oz</td>
</tr>
<tr>
<td>25</td>
<td>0.05%</td>
<td>8.25 oz</td>
</tr>
<tr>
<td></td>
<td>0.10%</td>
<td>16.5 oz</td>
</tr>
<tr>
<td>50</td>
<td>0.05%</td>
<td>16.5 oz</td>
</tr>
<tr>
<td></td>
<td>0.10%</td>
<td>33.0 oz</td>
</tr>
</tbody>
</table>

Steps When Mixing:

**IMPORTANT:** Do not pour Arilon into an empty tank.

1. Clean application tank prior to using Arilon.
2. Fill application tank with water to about half of desired volume.
3. Pour the appropriate amount of Arilon into tank.
4. Agitate.
5. Fill tank with remaining half volume of water and agitate again.
6. Treatment mixture is now ready to apply. If treatment mixture sits in the tank for extended periods, re-agitate prior to application.

**APPLICATION VOLUMES**

For indoor use, apply no more than 1 gallon per 1,000 sq ft. For exterior use with backpack or other hand sprayers, 1-4 gallons per 1,000 sq ft is recommended. The maximum volume for exterior use is 4 gallons per 1,000 sq ft.

For exterior use on medium to heavy infestations of pests, porous surfaces, complex sites, such as dense perimeter landscaping, or for maximum residual performance, use higher specified volumes.

**Large-Volume Exterior Applications**

If applying Arilon to exterior of structures using high-volume power-spray equipment, Arilon can be diluted to less than 0.05% concentration. For example, if targeted spray volume is 5 gallons of spray per 1,000 sq ft, mix 0.33 oz per 5 gallons of water. If targeted spray volume is 10 gallons of spray per 1,000 sq ft, mix 0.33 oz per 10 gallons of water. This mix rate and application volume will ensure proper coverage and distribution of the insecticide. These types of spray volumes may be necessary for exterior applications to dense vegetation, mulch or other challenging areas around structures.
CALIFORNIA RESTRICTIONS ON EXTERIOR APPLICATIONS:
When applying Arilon to the exterior of structures, do not exceed the limitations listed in the following table.

**TABLE 2: Directions for Outdoor Use in California**

<table>
<thead>
<tr>
<th>Amount of Arilon per Gallon (oz)</th>
<th>Dilution Concentration</th>
<th>Application Volume (gallons)</th>
<th>Minimum Treatment Interval (days)</th>
<th>Maximum Number of Applications per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.33</td>
<td>0.05%</td>
<td>1-3</td>
<td>30</td>
<td>12</td>
</tr>
<tr>
<td>0.66</td>
<td>0.10%</td>
<td>1-1.5</td>
<td>30</td>
<td>12</td>
</tr>
</tbody>
</table>

**High-Volume Applications Using Power Sprayers**

<table>
<thead>
<tr>
<th>Amount of Arilon per 10 Gallons (oz)</th>
<th>Dilution Concentration</th>
<th>Application Volume (gallons)</th>
<th>Minimum Treatment Interval (days)</th>
<th>Maximum Number of Applications per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3</td>
<td>0.05%</td>
<td>3</td>
<td>30</td>
<td>12</td>
</tr>
<tr>
<td>1.7</td>
<td>0.025%</td>
<td>4</td>
<td>30</td>
<td>4</td>
</tr>
<tr>
<td>0.66</td>
<td>0.010%</td>
<td>4-7</td>
<td>30</td>
<td>6</td>
</tr>
<tr>
<td>0.33</td>
<td>0.005%</td>
<td>4-10</td>
<td>7 days</td>
<td>12</td>
</tr>
</tbody>
</table>

Volumes listed in gallons per 1,000 sq ft area treated.

**TABLE 3: General Household Pests**

<table>
<thead>
<tr>
<th>Pests Controlled</th>
<th>Concentration of Active Ingredient in Final Dilution</th>
<th>Rates for Mixing2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ants</td>
<td>0.05% – 0.1%1</td>
<td>To mix 0.05% concentration: Use 0.33 oz Arilon per gallon water.</td>
</tr>
<tr>
<td>Beetles</td>
<td></td>
<td>To mix 0.1% concentration: Use 0.66 oz Arilon per gallon water.</td>
</tr>
<tr>
<td>Carpenter bees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centipedes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cockroaches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Earwigs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fleas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flies3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grasshoppers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kudzu bugs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Millipedes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pantry Pests (including beetles such as granary weevil and saw-toothed grain beetle)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillbugs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silverfish</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sowbugs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Springtails</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stink bugs (including brown marmorated stink bug)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Termites4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wasps2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1For heavy infestations or extreme environmental conditions, use the higher rate listed.
2Arilon is not a quick knockdown agent.
3For stable flies or permethrin-resistant house flies, use higher concentration (0.1%).
4This product is not to be used as sole protection against termites, as it is not designed to offer structural protection and will not prevent future infestations. Refer to section on termites for further information.
5For outdoor applications in California, refer to Table 2.

**APPLICATION DIRECTIONS**

**Ants**
Arilon is effective at controlling ants. Apply using a treatment solution containing 0.05%–0.1% indoxacarb in water (refer to Arilon dilution chart). For heavy infestations of ants and/or extreme environmental conditions, use the 0.1% rate.

**Indoors:** Apply Arilon using a coarse low-pressure spray as a spot or crack-and-crevice, general surface or perimeter banded treatment to control or prevent ant infestations. A perimeter band of 10 ft, for example, can include 3 ft up the exterior wall and out to 7 ft of horizontal substrate away from the wall base. Treat heavier infestations or more complex substrates such as stone or brick with greater volumes of treatment solution. Refer to volume directions earlier in this label for more information.

**Indoors:** For outdoor applications in California.

**Beetles, Boxelder Bugs, Centipedes, Crickets, Earwigs, Grasshoppers, Kudzu Bugs, Millipedes, Pillbugs, Silverfish, Sowbugs, Springtails and Stink Bugs**

Arilon is effective at controlling beetles, boxelder bugs, centipedes, crickets, earwigs, grasshoppers, kudzu bugs, millipedes, pillbugs, silverfish, sowbugs, springtails and stink bugs. Apply using a treatment solution containing 0.05%–0.1% indoxacarb in water (refer to dilution chart). For heavy infestations and/or extreme environmental conditions, use the higher listed rate.

**Indoors:** Apply Arilon using a coarse low-pressure spray as a spot or crack-and-crevice, general surface or perimeter banded treatment to control listed insect pests and to help prevent these nuisance pests from invading the structure. A perimeter band of 10 ft, for example, can include 3 ft up the exterior wall and out to 7 ft of horizontal substrate, away from the wall base. Treat heavier infestations or more complex substrates, such as stone or brick, with higher volumes of treatment solution. Refer to volume directions earlier in this label for more information.

**See Table 2 for Directions for Outdoor Use in California.**

**Carpenter Bees**
Arilon is effective at killing carpenter bees. Direct application to bees and their nests should be made to improve treatment to galleries.

When treating bee galleries, complete coverage of wood surfaces is important for optimal control. Note: Arilon will provide adequate control but is not a quick knockdown agent.
Cockroaches
Arlon is effective at controlling cockroaches. Apply using a solution containing 0.05%–0.1% indoxacarb in water (refer to Arilon dilution chart). For heavy infestations of cockroaches and/or extreme environmental conditions, use the higher listed rate.

Indoors: Apply Arilon using a coarse, low-pressure, spot or crack-and-crevice treatment at a maximum volume of 1 gallon per 1,000 sq ft that targets areas of cockroach infestation or areas known or suspected to be cockroach harborage sites. Direct applications can be made to areas including, but not limited to, pest entry sites, attics, wall voids, behind cabinets or equipment, under counters or appliances, along baseboards and reticulation systems. Arilon may be applied as a crack and crevice or spot application using ULV equipment, such as a Micro Injector® or Actisol® machine.

Outdoors: Apply Arilon using a coarse, low-pressure spray as a spot, crack-and-crevice, general surface or perimeter banded treatment to control or prevent cockroach infestations. A perimeter band of 10 ft, for example, can include 3 ft up the exterior wall and out to 7 ft of horizontal substrate away from the wall base. Treat heavier infestations or more complex substrates, such as stone or brick, with greater volumes of treatment solution. Refer to volume directions earlier in this label for more information. In addition to exterior structural elements, outdoor breeding sites, such as refuse collection areas, loading docks, adjacent tree holes, crawl spaces, or other sources of cockroach infestations, should be located and receive a treatment.

See Table 2 for Directions for Outdoor Use in California.

Fleas
Arlon is effective at killing flea larvae and adults.

Indoors: Direct application as crack-and-crevice or spot treatment to and around pet bedding areas and other known breeding areas of adult or larval fleas.

Outdoors: Direct application as spot or broadcast treatment within perimeter of structures known to harbor fleas. Use of higher volume (2-4 gallons per 1,000 sq ft) will provide better coverage in most outdoor substrates, such as lawn, mulch, and other flea breeding areas.

See Table 2 for Directions for Outdoor Use in California.

Flies (including permethrin-resistant house flies)
Arlon is effective at killing house flies, fruit flies and other filth/flesh flies. Arilon is also effective at killing stable flies and permethrin-resistant house flies using a higher concentration (0.1%) spray dilution.

Indoors: Apply as a crack-and-crevice or spot application to fly resting areas at a maximum volume of 1 gallon per 1,000 sq ft.

Outdoors: Apply as a spot or surface/broadcast application directly to flies or to fly resting areas. Use of higher volumes (2-4 gallons per 1,000 sq ft) will provide better coverage in or on many outdoor substrates and areas.

See Table 2 for Directions for Outdoor Use in California.

Pantry Insect Pests
Before application of Arilon, infested food materials must be removed and discarded. For control of pantry insect pests/stored product insect pests, including beetles such as granary weevil and saw-toothed grain beetle, apply Arilon as a crack-and-crevice or spot treatment at a maximum volume of 1 gallon per 1,000 sq ft to infested areas, focusing on cracks in food storage areas, closets, cabinets, shelving and baseboards. Direct application to pantry insect pests will provide best results. Do not apply directly to food. Remove or cover any remaining food items or food serving surfaces.

Termites
Arlon will kill subterranean termite species of Coptotermes, Heterotermes, Reticulitermes, and Zootermopsis dampwood termites. This product will kill workers and/or winged reproductive forms of termites present at the time of application only. Application of this product will not provide structural protection nor substitute for mechanical alteration, soil or foundation treatment with termiticide. This product is not to be used as sole protection against termites as it is not designed to offer structural protection and will not prevent future infestations. A professional inspection is recommended.

Arlon can be applied as a spot treatment to kill active termites by applying as a coarse liquid spray at 1 gallon per 10 sq ft of infested area. Treat infested sites directly. Apply using a treatment solution containing 0.05%–0.1% indoxacarb in water (refer to Arilon dilution chart). For heavy infestations of termites and/or extreme environmental conditions, use the higher listed rate.

Wasps
Arlon is effective at killing wasps. Direct application to insects including nests should be made with pin stream or coarse spray. Ensure complete coverage when treating nests directly. Note: Arilon will provide adequate control but is not a quick knock-down agent.

FOOD-HANDLING ESTABLISHMENTS
(Food-handling establishments are places other than private residences in which food is held, processed, prepared or served.)

Applications in Nonfood Areas: Arilon may be used as a spot or crack-and-crevice treatment at a maximum volume of 1 gallon per 1,000 sq ft to control cockroaches in residential structures and the non-food areas of commercial, industrial, public and institutional buildings/structures, including restaurants, warehouses, food processing plants, supermarkets, hospitals, nursing homes, motels, hotels, schools, daycares, laboratories, computer facilities, aircraft, buses, boats/ships, trains, pet shops and zoos.

Non-food/non-feed areas include areas such as garbage rooms, lavatories, floor drains (to sewers), entries, and vestibules, offices, locker rooms, machine rooms, boiler rooms, garages, mop closets and storage (after bottling or canning). Refer to section below for use directions and restrictions when making applications in food/feed handling areas of Food/Feed Handling Establishments.

Applications in Food/Feed-Handling Areas: Application to food/feed areas of food/feed-handling establishments may be used as a spot or crack-and-crevice treatment at a maximum volume of 1 gallon per 1,000 sq ft.

Food- and feed-handling areas include areas for receiving, storage, packing (canning, bottling, wrapping, boxing), preparing edible waste storage, and enclosed processing systems (mills, rendered edible oils, syrup). Serving areas are also considered a food/feed area when food is exposed and facility is in operation.

Apply into cracks and crevices using equipment designed to deliver a pin stream between different elements of construction, between floor and equipment, openings to voids and hollow spaces in walls, bases and equipment.

Specific Restrictions:
• Do not apply to areas or surfaces where food/feed, food utensils or food-processing surfaces may come into contact and become contaminated.
• Do not apply to areas that are routinely washed, such as cracks and crevices in tops of tables, food/feed preparation and prepared food holding surfaces.

RE-TREATMENT DIRECTIONS
Application to specific areas previously untreated can be made as necessary. Typical or maintenance applications can be made as frequently as necessary up to a maximum of once per month. For heavy infestations of insect pests that require more than one treatment application to gain control, retreatment is allowed 7 days after initial application.
STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Pesticide Storage: Store product in original container only in a location inaccessible to children and pets. Do not contaminate water, other pesticides, fertilizer, food or feed in storage.

Pesticide Disposal: Do not contaminate water, food or feed by storage or disposal. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinseate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional office for guidance.

Container Handling [plastic packets]: Non-refillable container. Do not reuse or refill this container. Completely empty plastic packet into application equipment. Then offer for recycling if available, or dispose of empty packet in the trash, in a sanitary landfill, or by incineration.

Container Handling [bags]: Non-refillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available, or dispose of empty bag in the trash, in a sanitary landfill, or by incineration.

Container Handling [less than or equal to 50 pounds]: Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinse into application equipment or a mix tank or store rinseate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Container Handling [fiber drums with liners]: Non-refillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then offer for recycling if available or dispose of liner in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities. If drum is contaminated and cannot be reused, dispose of it in the same manner as required for disposal of the liner.

Syngenta warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable or beyond the control of Seller or Syngenta, and, (2) Buyer and User assume the risk of any such use. To the extent permitted by applicable law, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall Syngenta be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Syngenta Crop Protection, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold Syngenta and Seller harmless for any claims relating to such factors.

Syngenta Crop Protection at 1-800-334-9481.

Manufactured for:
Syngenta Crop Protection, LLC
P.O. Box 18300
Greensboro, North Carolina 27419-8300
SCP 1501A-L4B 1015
1. PRODUCT IDENTIFICATION

Product identifier on label: ARILON®
Product No.: A20382A
Use: Insecticide
Manufacturer: Syngenta Crop Protection, LLC
Post Office Box 18300
Greensboro NC 27419
Manufacturer Phone: 1-800-334-9481
Emergency Phone: 1-800-888-8372

2. HAZARDS IDENTIFICATION

Classifications:
Oral: Category 4
Inhalation: Category 4
Specific Target Organ Toxicity: Repeated Category 1

Signal Word (OSHA): Danger
Hazard Statements:
Harmful if swallowed
Harmful if inhaled
Causes damage to organs through prolonged or repeated exposure

Precautionary Statements:
Do not breathe mist, vapors, spray.
Wash hands and face thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
If swallowed: Call a poison center, doctor or Syngenta if you feel unwell. Rinse mouth.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
Call a poison center, doctor or Syngenta if you feel unwell.
Dispose of contents and container in accordance with local regulations.

Other Hazard Statements:
May form combustible dust concentrations in air.
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Common Name</th>
<th>CAS Number</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other ingredients</td>
<td>Other ingredients</td>
<td>Trade Secret</td>
<td>80%</td>
</tr>
<tr>
<td>methyl (4aS)-7-chloro-2,5-dihydro-2-[(methoxycarbonyl)[4-(trifluoromethoxy)phenyl]amino]carbonyl]indeno[1,2-e][1,3,4]oxadiazine-4a(3H)-carboxylate</td>
<td>Indoxacarb Technical</td>
<td>173584-44-6</td>
<td>20%</td>
</tr>
</tbody>
</table>

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

4. FIRST AID MEASURES

Have the product container, label or Safety Data Sheet with you when calling Syngenta (800-888-8372), a poison control center or doctor, or going for treatment.

Ingestion: If swallowed: Call Syngenta (800-888-8372), a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so after calling 800-888-8372 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Eye Contact: If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

Skin Contact: If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

Inhalation: If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call Syngenta (800-888-8372), a poison control center or doctor for further treatment advice.

**Most important symptoms/effects:**

Not Applicable

**Indication of immediate medical attention and special treatment needed:**

There is no specific antidote if this product is ingested.

Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:

Use dry chemical, foam or CO2 extinguishing media. If water is used to fight fire, dike and collect runoff.

Specific Hazards:

Fire will spread by smoldering or slow decomposition.

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

Special protective equipment and precautions for firefighters:

Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion.
6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures:
Follow exposure controls/personal protection outlined in Section 8.

Methods and materials for containment and cleaning up:
Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

7. HANDLING AND STORAGE

Precautions for safe handling:
This material is capable of forming flammable dust clouds in air, which, if ignited, can produce a dust cloud explosion. Flames, hot surfaces, mechanical sparks and electrostatic discharges can serve as ignition sources for this material. Electrical equipment should be compatible with the flammability characteristics of this material. The flammability characteristics will be made worse if the material contains traces of flammable solvents or is handled in the presence of flammable solvents.

In general personnel handling this material and all conducting equipment should be electrically earthed or grounded. Bulk bags (FIBC) used to contain this material should be Type B, Type C or Type D. Type C bags must be electrically grounded or earthed before powder is charged to or discharged from the bag. If metal or fiber drums are used to contain this material, make certain the metal parts are bonded to the filling equipment and grounded.

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

This material can become readily charged in most operations.

Conditions for safe storage, including any incompatibilities:
Not Applicable

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Occupational Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>Other</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other ingredients</td>
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<td>Not Established</td>
<td>Not Established</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Indoxacarb Technical</td>
<td>Not Established</td>
<td>Not Established</td>
<td>1 mg/m³ 8hr &amp; 12hr TWA (respirable)</td>
<td>Manufacturer</td>
</tr>
</tbody>
</table>

Appropriate engineering controls:
Use effective engineering controls to comply with occupational exposure limits (if applicable).

Individual protection measures:

Ingestion:
Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the
material. Wash thoroughly with soap and water after handling.

Eye Contact:
Where eye contact is likely, use dust-proof chemical goggles.

Skin Contact:
Where contact is likely, wear chemical-resistant gloves (such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyvinyl chloride [PVC] or Viton), coveralls, socks and chemical-resistant footwear.

Inhalation:
A particulate filter respirator may be necessary until effective engineering controls are installed to comply with occupational exposure limits. Use NIOSH certified respirator with any N, R, P or HE filter. Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light tan to white granules
Odor: Slight
Odor Threshold: Not Available
pH: 8.1 - 9.1
Melting point/freezing point: Not Available
Initial boiling point and boiling range: Not Available
Flash Point (Test Method): Not Available
Flammable Limits (% in Air): Not Available
Flammability: Not Available
Vapor Pressure: Indoxacarb Technical Not Available
Vapor Density: Not Available
Relative Density: 0.50 - 0.70 g/ml Bulk density (tapped)
Solubility (ies): Indoxacarb Technical Not Available
Partition coefficient: n-octanol/water: Not Available
Autoignition Temperature: Not Available
Decomposition Temperature: Not Available
Viscosity: Not Available
Other: None

10. STABILITY AND REACTIVITY

Reactivity: Not reactive.
Chemical stability: Stable under normal use and storage conditions.
Possibility of hazardous reactions: Will not occur.
Conditions to Avoid: None known.
Incompatible materials: None known.
11. TOXICOLOGICAL INFORMATION

Health effects information
Likely routes of exposure: Dermal, Inhalation
Symptoms of exposure: Not Applicable
Delayed, immediate and chronic effects of exposure: Not Applicable

Numerical measures of toxicity (acute toxicity/irritation studies (finished product))

<table>
<thead>
<tr>
<th>Route</th>
<th>LD50/ LC50 (Rat)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingestion</td>
<td>Oral</td>
<td>1909 mg/kg body weight</td>
</tr>
<tr>
<td>Dermal</td>
<td>Dermal</td>
<td>&gt; 5000 mg/kg body weight</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Inhalation</td>
<td>&gt; 4.8 mg/l air - 4 hours</td>
</tr>
</tbody>
</table>

Eye Contact: Slightly Irritating (Rabbit)
Skin Contact: Slightly Irritating (Rabbit)
Skin Sensitization: Not a sensitizer in animal tests (Guinea Pig)

Reproductive/Developmental Effects
Indoxacarb Technical: Animal testing showed effects on reproduction at levels equal to or above those causing parental toxicity.
Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.

Chronic/Subchronic Toxicity Studies
Indoxacarb Technical: The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions.
Inhalation; rat: Incoordination, mortality, red blood cell destruction causing abnormal decrease in number of red blood cells (anemia)

Carcinogenicity
Indoxacarb Technical: Animal testing did not show any carcinogenic effects.
Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
Did not cause genetic damage in animals.

Chemical Name: methyl (4aS)-7-chloro-2,5-dihydro-2-[[methoxycarbonyl][4-(trifluoromethoxy)phenyl]amino]carbonyl]inden o[1,2-e][1,3,4]oxadiazine-4a(3H)-carboxylate
NTP/IARC/OSHA Carcinogen: No

Other ingredients: No

Other Toxicity Information: None

Toxicity of Other Components
Other ingredients: Not Established
ARILON®

Date: 2/17/2016
Replaces: 7/1/2015

Target Organs

<table>
<thead>
<tr>
<th>Active Ingredients</th>
<th>Nervous system</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Inert Ingredients</th>
<th>Not Established</th>
</tr>
</thead>
</table>

Other ingredients: Not Established

12. ECOLOGICAL INFORMATION

Eco-Acute Toxicity

Indoxacarb Technical:
- Fish (Rainbow Trout) 96-hour LC50 0.65 mg/l
- Bird (Bobwhite Quail) LD50 Oral 98 mg/kg
- Invertebrate (Water Flea) Daphnia Magna 48-hour EC50 0.60 mg/l

Information given is based on data on the components and the ecotoxicology of similar products.
Environmental Hazards: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark.

13. DISPOSAL CONSIDERATIONS

Disposal:
- Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Not Applicable
Listed Waste: Not Applicable

14. TRANSPORT INFORMATION

DOT Classification
- Ground Transport - NAFTA
  - Not regulated

Comments
- Water Transport - International
  - Proper Shipping Name: Environmentally Hazardous Substance, Solid, N.O.S. (Indoxacarb)
  - Hazard Class: Class 9
  - Identification Number: UN 3077
  - Packing Group: PG III

Air Transport
- Proper Shipping Name: Environmentally Hazardous Substance, Solid, N.O.S. (Indoxacarb)
- Hazard Class: Class 9
- Identification Number: UN 3077
- Packing Group: PG III
15. REGULATORY INFORMATION

Pesticide Registration:
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: CAUTION: Harmful if swallowed. Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Harmful if inhaled. Avoid breathing (dust, vapor or spray mist). Remove contaminated clothing and wash clothing before reuse.

EPA Registration Number(s):
100-1501

EPCRA SARA Title III Classification:
- Section 311/312 Hazard Classes: Acute Health Hazard
- Section 313 Toxic Chemicals: None

CERCLA/SARA 304 Reportable Quantity (RQ):
Not Applicable

RCRA Hazardous Waste Classification (40 CFR 261):
Not Applicable

TSCA Status:
Exempt from TSCA, subject to FIFRA

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA Hazard Ratings</th>
<th>HMIS Hazard Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health:</td>
<td>Health:</td>
</tr>
<tr>
<td>Flammability:</td>
<td>Flammability:</td>
</tr>
<tr>
<td>Instability:</td>
<td>Reactivity:</td>
</tr>
</tbody>
</table>

Syngenta Hazard Category: D

For non-emergency questions about this product call:
1-800-334-9481

Original Issued Date: 5/6/2013  
Revision Date: 2/17/2016  
Replaces: 7/1/2015  
Section(s) Revised: 5, 7,

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.
Non-Toxic Rodent Monitoring Bait

*Biomarker Luminesces Under Black Light*

Highly Palatable • All-Weather
DETEX BLOX is a non-toxic, highly palatable bait for monitoring rodent activity in sensitive areas. Each DETEX BLOX weighs 20 grams.

**DIRECTIONS FOR USE:**
Bait should be placed in bait stations or otherwise secured and out of reach of non-target animals. Place bait around the periphery of buildings, especially near likely locations of rodent entry, and in areas that provide rodent harborage. Record locations for future reference.

**Rats:** Place 3 - 6 DETEX BLOX every 9 - 15 meters (30 to 50 feet).

**Mice:** Place 1 - 2 DETEX BLOX every 2 - 4 meters (6 to 14 feet).

Inspect bait routinely for rodent activity and more often during the autumn season. Replace spoiled bait immediately. If the bait has been gnawed or eaten, replace DETEX BLOX with toxic bait or traps as appropriate until the infestation has been controlled. DETEX BLOX is non-toxic and may be disposed of in the same manner as other food products.

DETEX BLOX is a non-toxic, highly palatable bait for monitoring rodent activity in sensitive areas. Each DETEX BLOX weighs 20 grams.

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SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: DETEX® BLOX with LUMITRACK
EPA Registration Number: NA
Relevant identified uses of the substance or mixture and uses advised against
Relevant identified uses: Activity Monitoring - Ready to use
Uses advised against: Use only for the purpose described above

MANUFACTURER/SUPPLIER:
Bell Laboratories, Inc.
3699 Kinsman Blvd.
Madison, WI 53704, USA
Email: sds@belllabs.com
Phone: 608-241-0202
Medical or Vet Emergency: 877-854-2494 or 952-852-4636
Spill or Transportation Emergency: 800-424-9300 (CHEMTREC)

SECTION 2. HAZARDS IDENTIFICATION

Classification according to Regulation OSHA 1910.1200(d): Not classified
Signal Word: None
See Section 15 for information on FIFRA applicable safety, health, and environmental classifications.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>% By weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inert and Non-Hazardous Ingredients (Unlisted components are non-hazardous)</td>
<td>Proprietary</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

Description of first aid measures
Ingestion: Non-Toxic
Inhalation: Not applicable.
Eye contact: Non-Toxic
Skin contact: Non-Toxic
Most important symptoms and effects, both acute and delayed
Non-Toxic
Advice to physician: Non-Toxic
Advice to Veterinarian: Non-Toxic

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media
Suitable Extinguishing Media: water, foam or inert gas.
Unsuitable Extinguishing Media: None known.
Special hazards arising from the mixture: High temperature decomposition or burning in air can result in the formation of toxic gases, which may include carbon monoxide.
Advice for firefighters: Wear protective clothing and self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: None. Non-Toxic
Environmental precautions: None. Non-Toxic
Methods and materials for containment and cleaning up
For Containment: None. Non-Toxic
For Cleaning Up: None. Non-Toxic
Reference to other sections: Refer to Sections 7, 8 & 13 for further details of personal precautions, personal protective equipment and disposal considerations.
SECTION 7. HANDLING AND STORAGE

Precautions for safe handling: Do not use near heat sources, open flame, or hot surfaces. Non-Toxic.
Conditions for safe storage, including any incompatibilities: None. Non-Toxic

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Established Limits

<table>
<thead>
<tr>
<th>Component</th>
<th>OSHA</th>
<th>ACGIH</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Not Established</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
</tbody>
</table>

Appropriate Engineering Controls: None. Non-Toxic
Occupational exposure limits: None. Non-Toxic
Personal Protective Equipment:
Respiratory protection: Not required
Eye protection: Not required
Skin protection: None. Non-Toxic
Hygiene recommendations: None. Non-Toxic

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties
Appearance/Color: Tan wax block
Odor: Sweet grain-like
Odor Threshold: Not applicable, odor not associated with a hazardous material.
pH: Not applicable, is not dispersible with water.
Melting point: Not applicable
Boiling point: Not applicable
Flash point: Not applicable, does not contain components classified as flammable.
Evaporation rate: Not applicable, is a solid.
Flammability: Not applicable, is a solid.
Upper/lower flammability or explosive limits: Not applicable, does not contain components classified as flammable or explosive.
Vapor Pressure: Not applicable
Vapor Density: Not applicable, is a solid
Relative Density: 1.13 g/mL @ 20°C
Solubility (water): Not water soluble
Solubility (solvents): Not applicable
Partition coefficient: n-octanol/water: Not applicable
Auto-ignition temperature: Not applicable, does not contain components classified as flammable.
Decomposition temperature: Not applicable
Viscosity: Not applicable, is not a liquid.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not Applicable
Chemical stability: Not Applicable
Possibility of hazardous reactions: Refer to Hazardous decomposition products
Conditions to avoid: Avoid extreme temperatures (below 0°C or above 40°C).
Incompatible materials: Not Applicable
Hazardous decomposition products: Not Applicable

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects
Acute Toxicity
LD50, oral (ingestion): Not Toxic
LD50, dermal (skin contact): Not Toxic
LC50, inhalation: Not Toxic
Skin corrosion/irritation: Not Toxic
Serious eye damage/Irritation: Not Toxic
Respiratory or skin sensitization: Not Toxic
Germ cell mutagenicity: Not Toxic
Carcinogenicity: Not Toxic
<table>
<thead>
<tr>
<th>Components</th>
<th>NTP</th>
<th>IARC</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

**Reproductive Toxicity:** Not Toxic  
**Aspiration Hazard:** Not Toxic  
**Target Organ Effects:** Not Toxic  

### SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity Effects:** Not Toxic  
**Persistence and degradability:** Not Toxic  
**Bioaccumulative potential:** Not Toxic  
**Mobility in Soil:** Not Toxic  
**Other adverse effects:** None  

### SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal:** Wastes resulting from the use of this product may be placed in trash, on-site, or at an approved waste disposal facility. Dispose of all wastes in accordance with all Federal, state and local regulations.

### SECTION 14. TRANSPORT INFORMATION

**UN number:** Not regulated  
**UN proper shipping name:** Not regulated  
**Transport hazard class(es):** Not regulated  
**Packing group:** Not regulated  
**Environmental Hazards:**  
- **DOT Road/Rail:** Not considered hazardous for transportation via road/rail.  
- **DOT Maritime:** Not considered hazardous for transportation by vessel.  
- **DOT Air:** Not considered hazardous for transportation by air.  
**Freight Classification:** LTL Class 60  
**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:** Not applicable  
**Special precautions for user:** None

### SECTION 15. REGULATORY INFORMATION

**Safety, health and environmental regulations/legislation specific for the substance or mixture:** Not applicable  
**Signal Word:** None  
**Precautionary Statements:** None  
**Potential Health Effects:**  
- **Eye Contact:** May cause irritation  
- **Skin Contact:** Non-irritating to the skin  
- **Ingestion:** Not harmful if swallowed  
**TSCA:** All components are listed on the TSCA Inventory or are not subject to TSCA requirements  
**CERCLA/SARA 313:** Not Toxic  
**CERCLA/SARA 302:** Not Toxic

### SECTION 16. OTHER INFORMATION

For additional information, please contact the manufacturer noted in Section 1.

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health: 0 (Not Toxic)</th>
<th>Flammability: 1 (slight)</th>
<th>Reactivity: 0 (stable)</th>
<th>Specific Hazard: None</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMIS</td>
<td>Health: 0 (Not Toxic)</td>
<td>Flammability: 1 (slight)</td>
<td>Reactivity: 0 (minimal)</td>
<td>Protective Equipment: None</td>
</tr>
</tbody>
</table>

**Disclaimer:** The information provided in this Safety Data Sheet has been obtained from sources believed to be reliable. Bell Laboratories, Inc. provides no warranties; either expressed or implied, and assumes no responsibility for the accuracy or completeness of the data contained herein. This information is offered for your consideration and investigation. The user is responsible to ensure that they have all current data, including the approved product label, relevant to their particular use.
Precautionary Statement
Hazards to Humans and Domestic Animals
CAUTION: Causes moderate eye irritation. Harmful if swallowed. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse. Wear safety glasses or goggles, long sleeve shirt, long pants, shoes and socks, and chemical-resistant gloves. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Skin exposure may also result in a sensation described as tingling, itching, burning or prickly feeling. Onset may occur immediately to 4 hours after exposure and may last 2 to 30 hours, without damage. Wash exposed areas thoroughly with soap and water. Relief from skin sensation may be obtained by applying an oil-based cream.

First Aid
If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
If swallowed: Call a poison control center or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

Note to Physician: Induced vomiting as first aid for this substance may result in increased risk of chemical pneumonia or pulmonary edema caused by aspiration of the hydrocarbon solvent. Vomiting should be induced only under professional supervision.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall International (866) 897-8050 for emergency medical treatment information.

Environmental Hazards
This pesticide is extremely toxic to fish and aquatic organisms and toxic to wildlife. 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 rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help to avoid run off to water bodies or drainage systems.
Do not allow applications to contact water inhabited by fish, such as aquariums and ornamental fish ponds that are located in and around structures being treated.
This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.
Physical and Chemical Hazards
Do not use or store near heat or open flame.
Do not use OPTIMATE CS in conduits, motor housings, junction boxes, switch boxes, or other electrical equipment because of possible shock hazard.

Optimate ® CS Controlled Release Insecticide

Optimate
® CS
Controlled Release Insecticide

EPA Reg. No. 67760-104-53883
EPA Est. No. 53883-TX-002

Optimate® CS
Controlled Release Insecticide

EPA Reg. No. 67760-104-53883
EPA Est. No. 53883-TX-02

Controlled Release Insecticide

A microencapsulated insecticide for use on and around buildings and structures for the control of listed pests, including on lawns, ornamental trees and shrubs, around residential, institutional, public, commercial, agricultural and industrial buildings; parks, recreational areas and athletic fields; and livestock/poultry housing and pet kennels.

Active Ingredient:
Gamma-cyhalothrin: Cyclopropane-carboxylic acid, 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-
2,2-dimethyl-cyano-(3-phenoxyphenyl) methyl ester .......................... 5.9%
Other Ingredients .......................................................... 94.1%
Total .......................................................... 100.0%

Contains 0.5 pounds of active ingredient per gallon
Contains petroleum distillate

KEEP OUT OF REACH OF CHILDREN
CAUTION PRECAUTION
Si usted no entiende la etiqueta, busque a alguien que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)
See label booklet for additional Precautionary Statements, Directions for Use and Storage and Disposal.

Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.

NET CONTENTS:
16 FL. OZ. (1 PT.)

Control Solutions
incorporated
5903 Genoa-Red Bluff
Pasadena, TX 77507-1041
EPA Reg. No. 67760-104-53883
EPA Est. No. 53883-TX-02

Manufactured for:
Control Solutions, Inc.
5903 Genoa-Red Bluff
Pasadena, TX 77507-1041
EPA 072412/REV A
OPTIMATE® CS
CONTROLLED RELEASE PREMISE INSECTICIDE

• A microencapsulated insecticide for use on and around buildings and structures for the control of listed pests, including on lawns, ornamental trees and shrubs, around residential, institutional, public, commercial, agricultural and industrial buildings; parks, recreational areas and athletic fields; and livestock/poultry housing and pet kennels.

• With CapVantage™ Technology.

• Treats up to 24,000 square feet when treating for litter beetles.

KEEP OUT OF REACH OF CHILDREN
CAUTION PRECAUÇION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See inside label booklet for additional Precautionary Statements, Directions for Use and Storage and Disposal.

Manufactured for:
Control Solutions, Inc.
5903 Genoa-Red Bluff
Pasadena, TX 77507-1041
Apply this product directly to lawn or garden area. Water treated area as directed on this label. Do not water to the point of run-off. Do not make applications during rain.

Application is prohibited directly into sewers or drains, or to any area like a gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur. Do not allow the product to enter any drain during or after application.

**Notice:** Shake well before use. Avoid freezing. Read the entire label. Use only according to label directions. **Before using this product,** read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.

In case of emergency endangering health call SafetyCall®, International (866) 897-8050.

**Precautionary Statement**

**Hazards to Humans and Domestic Animals**

**CAUTION:** Causes moderate eye irritation. Harmful if swallowed. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse. Wear safety glasses or goggles, long sleeve shirt, long pants, shoes and socks, and chemical-resistant gloves. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.

Skin exposure may also result in a sensation described as tingling, itching, burning or prickly feeling. Onset may occur immediately to 4 hours after exposure and may last 2 to 30 hours, without damage. Wash exposed areas thoroughly with soap and water. Relief from skin sensation may be obtained by applying an oil-based cream.
First Aid

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

If swallowed: Call a poison control center or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

Note to Physician: Induced vomiting as first aid for this substance may result in increased risk of chemical pneumonia or pulmonary edema caused by aspiration of the hydrocarbon solvent. Vomiting should be induced only under professional supervision.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall® International (866) 897-8050 for emergency medical treatment information.

Environmental Hazards

This pesticide is extremely toxic to fish and aquatic organisms and toxic to wildlife. 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 rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help to avoid run off to water bodies or drainage systems.
Do not allow applications to contact water inhabited by fish, such as aquariums and ornamental fish ponds that are located in and around structures being treated.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

**Physical and Chemical Hazards**

Do not use or store near heat or open flame.

Do not use OPTIMATE CS in conduits, motor housings, junction boxes, switch boxes, or other electrical equipment because of possible shock hazard.

**Directions for Use**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not dilute this product with oil.

Apply this product directly to lawn or garden area. Water treated area as directed on this label. Do not water to the point of run-off.

Do not make applications during rain.

Application is prohibited directly into sewers or drains, or to any area like a gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur. Do not allow the product to enter any drain during or after application.

Let treated surfaces dry before allowing humans and pets to contact these surfaces.

This product is RESTRICTED for use in New York State.
All outdoor applications must be limited to spot or crack-and-crevice treatments only, except for the following permitted uses:
1 – Treatment to soil or vegetation around structures;
2 – Applications to lawns, turf, and other vegetation;
3 – Applications to building foundations, up to a maximum height of 3 feet.

Other than applications to building foundations, all outdoor applications to impervious surfaces such as sidewalks, driveways, patios, porches, and structural surfaces (such as windows, doors, and eaves) are limited to spot and crack-and-crevice applications only.

**PREMISE AND PERIMETER PEST CONTROL**

**OPTIMATE CS** is for use as a general surface (nonfood/nonfeed areas), crack and crevice, or spot treatment in, on, and around buildings and structures and their immediate surroundings, and on modes of transport. Areas of use include, industrial buildings, houses, patios, porches, closets, furniture, apartment buildings, mobile homes, laboratories, buses, greenhouses (non-commercial), stores, factories, warehouses, wineries, vessels, railcars, trucks, trailers, aircraft (cargo and other non-cabin areas only), schools, nursing homes, hospitals, mausoleums, restaurants, hotels, correctional facilities, livestock/poultry housing, pet kennels, food granaries, food grain mills and food manufacturing, processing, and servicing establishments.

Nonfood/nonfeed areas of food/feed handling establishments include garbage rooms, lavatories, floor drains (to sewers), entries and vestibules, offices, locker rooms, machine rooms, boiler rooms, garages, mop closets, and storage (after canning or bottling).

For indoor applications, **OPTIMATE CS** can be reapplied at 21-day intervals if necessary.
Mixing Instructions
Dilute OPTIMATE CS with water for application using hand-held or power-operated application equipment as a coarse spray for crack and crevice or spot and general surface (non-food/non-feed areas only) treatments. Application equipment that delivers low volume treatments, such as the Micro-Injector® or Actisol® applicator, may also be used to make crack and crevice or spot and general surface treatments. Fill applicator tank with the desired volume of water and add OPTIMATE CS. Close and shake before use in order to ensure proper mixing. Shake or reagitate applicator tank before use if application is interrupted. Mix only amount of treatment volume as required. OPTIMATE CS may be applied by using a paintbrush or other porous applicator attached to a handle as a general surface treatment.

Tank Mixing
OPTIMATE CS may be tank mixed with other currently registered pesticides unless expressly prohibited by the product label. A small volume mixing test with the other products is recommended to ensure compatibility. If other chemicals are added to the applicator tank, OPTIMATE CS should be added last. If mixed with EC formulations, use within 24 hours. Fill tank to desired volume and continue to agitate while making applications.

OPTIMATE CS may be tank mixed with an Insect Growth Regulator (IGR). Observe all restrictions and precautions which appear on the labels of these products.

Foam Applications
OPTIMATE CS may be converted to a foam and the foam used to treat premise voids to control or prevent pests including ants, bees, termites (above ground only), wasps, or other arthropods harboring in walls, under slabs, or in other void areas.
## RATES FOR PESTS (HAND APPLICATION EQUIPMENT)

<table>
<thead>
<tr>
<th>Pests</th>
<th>Dilution Rate (Concentration of AI)</th>
<th>Specific Use Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ants</td>
<td>Rate range: 0.015% AI</td>
<td><strong>Ants</strong>: Apply to any trails around doors and windows and other places where ants may be found. Locate and treat nests. Where ants are trailing inside, apply as a residual surface treatment to active areas such as baseboards, corners, around pipes, in and behind cabinets, behind and under refrigerators, sinks, furnaces and stoves, cracks and crevices. When combining baits and residual surface insecticides, apply surface insecticides in cracks and crevices, along baseboards, and infested surfaces and outside barrier treatments. Use baits in other areas that are untreated by residual insecticides; also see Outdoor Surfaces Use.</td>
</tr>
<tr>
<td>Bedbugs (adult)</td>
<td>1.0 fl oz (30 mL) / 3 gal water</td>
<td></td>
</tr>
<tr>
<td>Bees</td>
<td>0.33 fl oz (10 mL) / gal water</td>
<td></td>
</tr>
<tr>
<td>Boxelder Bugs</td>
<td>0.5 fl oz (15 mL) / gal water</td>
<td></td>
</tr>
<tr>
<td>Carpenter Bees</td>
<td>3 gal water</td>
<td></td>
</tr>
<tr>
<td>Carpet Beetles</td>
<td>Up to</td>
<td></td>
</tr>
<tr>
<td>Centipedes</td>
<td>0.015% AI</td>
<td></td>
</tr>
<tr>
<td>Cigarette Beetles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clover Mites</td>
<td>0.33 fl oz (10 mL) / gal water</td>
<td></td>
</tr>
<tr>
<td>Cockroaches (1)</td>
<td>0.16 fl oz (5 mL) / gal water</td>
<td></td>
</tr>
<tr>
<td>Confused Flour Beetles</td>
<td>0.0075% AI</td>
<td></td>
</tr>
<tr>
<td>Crickets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pests</td>
<td>Dilution Rate (Concentration of AI)</td>
<td>Specific Use Directions</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Earwigs</td>
<td>Rate range: 0.0075% AI</td>
<td><strong>Bedbugs</strong>: Clean floors and surfaces by vacuuming. Apply as a coarse, low-pressure spray to harborage areas including crevices, baseboards, loose plaster, behind bed frames and headboards, beneath beds and furniture, and to bed springs and bed frames. Do not apply to furniture surfaces or mattresses where people will be laying or sitting. Infested bedding should not be treated, but should be removed, placed in sealed plastic bags, and taken for laundering and drying at high temperatures.</td>
</tr>
<tr>
<td>Firebrats</td>
<td>0.16 fl oz (5 mL) / gal water</td>
<td></td>
</tr>
<tr>
<td>Fleas (2)</td>
<td>0.5 fl oz (15 mL) / 3 gal water</td>
<td></td>
</tr>
<tr>
<td>Flies (including House flies, stable flies, little house flies)</td>
<td>Up to 0.015% AI</td>
<td></td>
</tr>
<tr>
<td>Lesser Grain Borers</td>
<td>0.33 fl oz (10 mL) / gal water</td>
<td></td>
</tr>
<tr>
<td>Millipedes</td>
<td>1.0 fl oz (30 mL) / 3 gal water</td>
<td></td>
</tr>
<tr>
<td>Mosquitoes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red Flour Beetles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rice Weevils</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saw-toothed Grain Beetles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silverfish</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sowbugs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spiders</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ticks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wasps</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(continued)
<table>
<thead>
<tr>
<th>Pests</th>
<th>Dilution Rate (Concentration of AI)</th>
<th>Specific Use Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cockroaches (1)</td>
<td>0.03% AI</td>
<td>pipes, doors and windows, attics and eaves, cabinets, behind and under refrigerators, sinks, furnaces and stoves, the underside of shelves, drawers and similar areas. Pay particular attention to cracks and crevices; also see Outdoor Surfaces Use.</td>
</tr>
<tr>
<td>Crickets (6)</td>
<td>0.65 fl oz (20 mL) / gal water</td>
<td></td>
</tr>
<tr>
<td>Flies (5)</td>
<td>2.0 fl oz (60 mL) / 3 gal water</td>
<td></td>
</tr>
<tr>
<td>Litter beetles (3) (Darkling, Hide and Carrion beetles)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mosquitoes (4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillbugs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scorpions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sowbugs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spiders (6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spider Mites (Two-spotted, Spruce)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ticks (6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bees, Flies, Mosquitoes, and Wasps:</td>
<td></td>
<td>Apply directly to walls, ceilings, window screens, and other resting areas as a residual surface treatment. May be used inside residential buildings as well as in and around carports, garages, and storage sheds; also see Outdoor Surfaces Use. Use caution when treating nests of stinging insects as OPTIMATE CS does not provide instant knockdown. Protective equipment for the applicator.</td>
</tr>
</tbody>
</table>

(continued)
<table>
<thead>
<tr>
<th>Pests</th>
<th>Dilution Rate (Concentration of AI)</th>
<th>Specific Use Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.03% AI</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.65 fl oz (20 mL) / gal water</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.0 fl oz (60 mL) / 3 gal water</td>
<td></td>
</tr>
<tr>
<td>May be required.</td>
<td>Treat bee, wasp and hornet nests</td>
<td></td>
</tr>
<tr>
<td></td>
<td>late in the day when most insects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>will be present. Allow 2-3 days</td>
<td></td>
</tr>
<tr>
<td></td>
<td>for the colony to die and repeat</td>
<td></td>
</tr>
<tr>
<td></td>
<td>if necessary.</td>
<td></td>
</tr>
<tr>
<td><strong>Carpenter Bees:</strong></td>
<td>Apply coarse spray to thoroughly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>wet wood surfaces where bees have</td>
<td></td>
</tr>
<tr>
<td></td>
<td>been previously active or to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>provide protection against further</td>
<td></td>
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<tr>
<td></td>
<td>damage. Apply early in the spring</td>
<td></td>
</tr>
<tr>
<td></td>
<td>to prevent bees from invading</td>
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</tr>
<tr>
<td></td>
<td>wood. When bees have infested wood,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>surface applications can help</td>
<td></td>
</tr>
<tr>
<td></td>
<td>control embedded larvae and bees</td>
<td></td>
</tr>
<tr>
<td></td>
<td>that emerge from the wood.</td>
<td></td>
</tr>
<tr>
<td><strong>Pantry Pests</strong>:</td>
<td>(i.e., Carpet beetle, Cigarette</td>
<td></td>
</tr>
<tr>
<td></td>
<td>beetle, Confused flour beetle,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lesser grain borer, Red flour</td>
<td></td>
</tr>
<tr>
<td></td>
<td>beetle, Rice weevil, and Saw-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>toothed grain beetle): Apply to</td>
<td></td>
</tr>
</tbody>
</table>

*(continued)*
<table>
<thead>
<tr>
<th>Pests</th>
<th>Dilution Rate (Concentration of AI)</th>
<th>Specific Use Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.03% AI</td>
<td>cupboards, shelving, and storage areas. Remove all utensils, uncovered foodstuffs (or any having original package opened), and shelf paper before making application. Allow treated surfaces to dry and cover shelves with clean paper before replacing any utensils, foodstuff, or other items. Any foodstuff accidentally contaminated with treatment solution should be destroyed.</td>
</tr>
<tr>
<td></td>
<td>0.65 fl oz (20 mL) / gal water</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.0 fl oz (60 mL) / 3 gal water</td>
<td></td>
</tr>
</tbody>
</table>

*Boxelder Bugs, Centipedes, Millipedes, Pillbugs, and Sowbugs:* Apply around doors and windows and other places where these pests may be found or where they may enter premises. Treat baseboards, storage areas, and other locations. Apply barrier treatments to prevent infestation as described below; also see Outdoor Surfaces Use.

(continued)
<table>
<thead>
<tr>
<th>Pests</th>
<th>Dilution Rate (Concentration of AI)</th>
<th>Specific Use Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.03% AI</td>
<td>Fleas and Ticks: To control nuisance fleas and ticks (e.g. dog ticks) apply to kennels, yards, runs, and other areas where pets may frequent. To control ticks, apply using a coarse fan spray to vegetation brush, branches, rock walls, and other areas near habitation where ticks may harbor or frequent. Treat entire area rather than spot treatments, and retreat monthly to maintain control. Do not apply to pasture or cropland, and do not allow animals and people access to treated areas until the deposit has dried. Applications can begin in the spring and can continue until frost to control both larvae and adult ticks; also see Outdoor Surfaces Use.</td>
</tr>
<tr>
<td></td>
<td>0.65 fl oz (20 mL) / gal water</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.0 fl oz (60 mL) / 3 gal water</td>
<td></td>
</tr>
</tbody>
</table>

Cluster Flies: Apply in late summer or early fall before flies are observed alighting on surfaces. Apply thorough-

(continued)
<table>
<thead>
<tr>
<th>Pests</th>
<th>Dilution Rate (Concentration of AI)</th>
<th>Specific Use Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.03% AI&lt;br&gt;0.65 fl oz (20 mL) / gal water&lt;br&gt;2.0 fl oz (60 mL) / 3 gal water</td>
<td>Lately on siding, under eaves, and around windows and doors, paying particular attention to south-facing surfaces, but do not allow runoff to occur. Heavy precipitation prior to frost may require retreatments to maintain protection. In winter and spring when flies become active and are emerging, interior crack and crevice and void treatments can help reduce the infestation, along with ULV or general surface application in infested attics or unoccupied lofts. <strong>Litter Beetles (Darkling, Hide, and Carrion Beetles) and Flies In Animal Housing (Such As Poultry Houses):</strong> To control adult litter beetles, apply <strong>OPTIMATE CS</strong> to walls and floors at cleanout, before reintroduction of</td>
</tr>
</tbody>
</table>

(continued)
<table>
<thead>
<tr>
<th>Pests</th>
<th>Dilution Rate (Concentration of AI)</th>
<th>Specific Use Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.03% AI</td>
<td>animals. This will suppress beetles that escaped earlier treatment and will help delay onset of future infestations. Pay attention to areas where beetles frequently occur, such as walls, supports, cages, stalls, and around feeders. To help control flies, apply a directed application to horizontal surfaces and overhead areas and allow to dry before reintroduction of animals; also see Livestock/Poultry Housing Structures and Pet Kennels.</td>
</tr>
<tr>
<td></td>
<td>0.65 fl oz (20 mL) / gal water</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.0 fl oz (60 mL) / 3 gal water</td>
<td></td>
</tr>
<tr>
<td>Termites (above ground only)</td>
<td>0.03% AI</td>
<td>OPTIMATE CS may be used on termites to kill workers or winged reproductive forms which may be present in treated channels at the time of treatment. These applications are not a substitute for mechanical alteration to control subterranean termites, soil treatment labeled (continued)</td>
</tr>
<tr>
<td></td>
<td>0.65 fl oz (20 mL) / gal water</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.0 fl oz (60 mL) / 3 gal water</td>
<td></td>
</tr>
<tr>
<td>Pests</td>
<td>Dilution Rate (Concentration of AI)</td>
<td>Specific Use Directions</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td></td>
<td>0.03% AI</td>
<td>termiticides, or fumigation for extensive infestation of drywood termites or other wood-infesting insects, but are considered supplemental. This product is not recommended as sole protection against termites. For active termite infestations, get a professional inspection.</td>
</tr>
<tr>
<td></td>
<td>0.65 fl oz (20 mL) / gal water</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.0 fl oz (60 mL) / 3 gal water</td>
<td></td>
</tr>
</tbody>
</table>

Note: One gallon finished dilution typically treats 500 – 1000 sq. ft.

1. For cockroaches, the recommended rate for maintenance treatments is 0.0075% and for clean-out treatments is 0.015%. For control of severe infestations, use 0.03% rate.
2. For outdoor use only and use 0.015% rate.
3. Use the 0.015% (0.33 fl oz (10 mL) / gal water) rate for light beetle infestation.
4. For residual control, use 0.03% rate.
5. In all states except California, rates for flies may be increased to 0.03% when environmental conditions are severe and/or populations are high.
6. For clean-out/severe infestations, use 0.03% rate.*

Conversion Rate: 1 fluid ounce (fl. oz.) equals 29 milliliters (mL)
**Application Within Food Handling Establishments**

For places other than private residences in which exposed food is held, processed, prepared, or served including, but not limited to, areas for receiving, storage, packing (canning, bottling, wrapping, boxing), preparing foods, edible waste storage and enclosed processing systems (mills, dairies, edible oils, syrups), and serving areas.

Use as a crack and crevice or spot treatment in and around both food and nonfood areas. Apply in small amounts directly into cracks and crevices, using equipment capable of delivering a pin stream of insecticide, in points between different elements of construction, between equipment and floor, openings leading to voids and hollow spaces in walls, equipment and bases. Food contact surfaces and equipment should be cleaned with an effective cleaning compound and rinsed with potable water before using.

Limit individual spot treatments to an area no larger than 20% of the treated surface. Individual spot treatments may not exceed two sq. ft. Take extreme care that the product is not introduced into the air. Avoid contamination of food and food processing surfaces.

**Application Within Food Serving Areas**

For facilities where foods are served, such as dining rooms. Apply as a crack and crevice or spot treatment to selective surfaces such as baseboards, under elements of construction, and into cracks and crevices. Avoid treating surfaces likely to be contacted by food. (Do not apply when facility is in operation or foods are exposed.) Food must be covered or removed in area being treated. Do not apply directly to food or allow applications to contaminate food.
NOTE: Application of this product in the Food Areas and/or Food Serving Areas of Food Handling Establishments other than as a spot and/or crack and crevice treatment is not permitted. Use of application equipment such as the Micro-Injector or Actisol applicator in food areas should be limited to crack and crevice treatment only.

Livestock/Poultry Housing Structures and Pet Kennels: OPTIMATE CS may be used as a general surface and/or crack and crevice treatment. Treat interior and exterior perimeter applications in and around livestock, poultry and pet housing structures for optimum control. Suitable cleaning practices of the structure must also be followed along with applications of OPTIMATE CS insecticide to effectively control the listed insects.

LITTER BEETLES: To control adult litter (darkling, hide and carrion beetles) beetles in animal housing, including poultry housing, apply OPTIMATE CS insecticide to walls and floors at each grow-out or sanitation procedure, before reintroduction of poultry or other animals. Re-apply after each grow-out or sanitation procedure to control beetles that escaped earlier treatment and delay the onset of further infestations. Beetles frequently occur in areas such as on walls, supports, cages, stalls and around feeders, so pay careful attention to these places. For poultry houses where birds are grown on litter, treat the floor area. For poultry houses where birds are grown in cages, treat the walls, posts, cage framing and into cracks and crevices around insulation. Also apply as a perimeter treatment around the outside of the building foundations to prevent beetles from entering from outside. To prevent populations from reaching a problem level, a year-round maintenance program is highly recommended.
Restrictions:

- **Do not** make applications of **OptiMate CS** insecticide in areas where animals, except for cattle and calves, are present in the facility. Allow treated surfaces to dry completely before restocking the facility.
- **Do not** make applications to any animal feedstuffs, water or watering equipment.
- **Do not** contaminate any animal food, feed or water in and around livestock, poultry or pet housing when making applications.

**Outdoor Surfaces and Perimeters**

To control flies, fleas, mosquitoes, ants, bees, wasps, centipedes, cockroaches, crickets, pillbugs, scorpions, sowbugs, spiders, termites* (above ground only), ticks and other listed pests, apply **OptiMate CS** with either hand or power application equipment as a residual treatment to ornamental plants next to foundations of buildings and to external surfaces of buildings, porches, screens, door and window frames, eaves, patios, garages, refuse dumps and other areas where insects rest or congregate. **OptiMate CS** may also be applied to lawns around non-residential buildings, or to refuse dumps or other non-residential areas where these insect pests congregate. Remove all exposed food and cooking utensils. Cover all food handling surfaces or wash thoroughly after treatment and before use. Do not use on edible crops.

For Perimeter treatments, apply a continual band of insecticide around building foundations and around windows, doors, service line entrances, eaves, vents, and other areas to reduce the potential for entry by crawling pests. Before application, remove debris and leaf litter from next to the foundation, cut back vegetation and branches that touch the foundation, and move or rake back rocks, deep mulch, or other potential
pest harborage next to the foundation. Apply the band up to 10 ft. wide around the structure (or according to state regulations governing commercial pest control) and upwards along the foundation to 3 ft. and around windows, doors, and roof overhangs. Apply as a coarse spray to thoroughly and uniformly wet the foundation and/or band area so that the insecticide will reach the soil or thatch level where pests may be active.

Amount of concentrate is dependent upon pest species (see pest table and comments), infestation levels, and service interval desired.

*May be used on termites to kill workers or winged reproductive forms which may be present in treated channels at the time of treatment. These applications are not a substitute for mechanical alteration to control subterranean termites, soil treatment labeled termiticides, or fumigation for extensive infestation of drywood termites or other wood-infesting insects, but are considered supplemental. This product is not recommended as sole protection against termites. For active termite infestations, get a professional inspection.

Rate Table For Perimeter Barrier Applications

<table>
<thead>
<tr>
<th>Application Rate: Fl. oz. (mL) of OPTIMATE CS</th>
<th>Gals. of Water</th>
<th>Area of Coverage (sq. ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.16 fl. oz. (5mL)</td>
<td>1-5 gals.</td>
<td>800-1600</td>
</tr>
<tr>
<td>0.33 fl. oz. (10 mL)</td>
<td>1-5 gals.</td>
<td>800-1600</td>
</tr>
<tr>
<td>0.65 fl. oz. (20 mL)</td>
<td>1-5 gals.</td>
<td>800-1600</td>
</tr>
</tbody>
</table>

* Application volume may be greater than 5 gals./800-1600 sq. ft. if required under heavy vegetative or landscaping materials in order to obtain desired coverage.
## Examples Of Dilutions For Perimeter Barrier Applications

<table>
<thead>
<tr>
<th>Application Volume Gals. of Solution per 1,000 sq. ft.</th>
<th>Application Rate Fl. oz. (mL) of OPTIMATE CS per 1,000 sq. ft.</th>
<th>Fl. oz. (mL) of OPTIMATE CS to Dilute in Water According to Spray Tank Volumes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 gal. per 1,000 sq. ft.</td>
<td>0.16 fl. oz. (5mL)</td>
<td>0.80 fl. oz. (25 mL)</td>
</tr>
<tr>
<td></td>
<td>0.33 fl. oz. (10mL)</td>
<td>1.65 fl. oz. (50 mL)</td>
</tr>
<tr>
<td></td>
<td>0.65 fl. oz. (20 mL)</td>
<td>3.3 fl. oz. (100 mL)</td>
</tr>
<tr>
<td></td>
<td>1.6 fl. oz. (50 mL)</td>
<td>3.3 fl. oz. (100 mL)</td>
</tr>
<tr>
<td></td>
<td>3.3 fl. oz. (100 mL)</td>
<td>6.5 fl. oz. (200 mL)</td>
</tr>
<tr>
<td>2 gal. per 1,000 sq. ft.</td>
<td>0.16 fl. oz. (5mL)</td>
<td>0.40 fl. oz. (12.5 mL)</td>
</tr>
<tr>
<td></td>
<td>0.33 fl. oz. (10mL)</td>
<td>0.80 fl. oz. (25 mL)</td>
</tr>
<tr>
<td></td>
<td>0.65 fl. oz. (20 mL)</td>
<td>1.65 fl. oz. (50 mL)</td>
</tr>
<tr>
<td></td>
<td>1.6 fl. oz. (50 mL)</td>
<td>3.3 fl. oz. (100 mL)</td>
</tr>
<tr>
<td></td>
<td>3.3 fl. oz. (100 mL)</td>
<td>6.5 fl. oz. (200 mL)</td>
</tr>
<tr>
<td>5 gal. per 1,000 sq. ft.</td>
<td>0.16 fl. oz. (5mL)</td>
<td>0.16 fl. oz. (5mL)</td>
</tr>
<tr>
<td></td>
<td>0.33 fl. oz. (10mL)</td>
<td>0.33 fl. oz. (10mL)</td>
</tr>
<tr>
<td></td>
<td>0.65 fl. oz. (20 mL)</td>
<td>0.65 fl. oz. (20 mL)</td>
</tr>
</tbody>
</table>
Example calculation: to apply the mid-rate of **OPTIMATE CS** at a volume of 5 gal./1000 sq. ft., mix 3.3 oz of concentrate in 50 gallons of water. The percent active ingredient in the finished **OPTIMATE CS** dilution can be calculated with the following formula:

\[
\text{mL needed to add} \times 5.9\% \text{ active in concentrate, divided by gal. finished dilution times 3785 mL/gal.} = \% \text{ active in dilution.}
\]

(Example: 3.3 oz. in 50 gal. is 100 mL times 5.9 equals 590, and 50 gal. times 3785 is 189250. Dividing 590 by 189250 equals 0.003% active in the tank dilution.)

**NOTE:** Do not use water based sprays of **OPTIMATE CS** in conduits, motor housings, junction boxes, switch boxes, or other electrical equipment because of possible shock hazard. Thoroughly wash out sprayer and screen with water and detergent before using **OPTIMATE CS.** **OPTIMATE CS** has not stained or caused damage to painted or varnished surfaces, plastics, fabrics, or other surfaces where water applied alone causes no damage. However, treat a small area and allow to dry, to determine whether staining will occur.

**LET TREATED SURFACES DRY BEFORE ALLOWING HUMANS AND PETS TO CONTACT SURFACES.**

**RESTRICTIONS:**

• **DO NOT** use this product with oil.
• **DO NOT** apply this product in any room being used as living, eating, sleeping, or recovery area by patients, the elderly, or infirm when they are in the room.
• **DO NOT** apply to institutions (including libraries, sports facilities, etc.) in the immediate area when occupants are present.
• **DO NOT** apply to classrooms when in use.
• **DO NOT** apply this product to edible growing crops or stored raw agricultural commodities used for food or feed.
• **DO NOT** allow applications to contact water inhabited by fish, such as in aquariums and ornamental fish ponds that are located in/around structures being treated.
LAWNS/TURFGRASS AND ORNAMENTALS

OPTIMATE CS may be used for applications to maintain indoor or outdoor areas where turf and ornamentals are grown such as residential landscaped areas and non-residential landscapes around institutional, public, commercial and industrial buildings, parks, recreational areas, and athletic fields (including trees, shrubs, flowers, evergreens, foliage plants and groundcovers). Application rates for turf and ornamentals are lower than premise pest control rates, reflecting that treatment intervals are more frequent.

Applicators must ensure that they are certified in the necessary pesticide certification categories to allow application of OPTIMATE CS away from structures, such as to turf and ornamental plantings. Premise pest control certification categories may limit the distance away from structures for pesticide application. Consult your state extension office or pesticide regulatory officials for further information.

IMPORTANT: Time application to flowering plants during periods when pollinating insects are not present, such as early morning or late evening.

RESTRICTIONS:
• DO NOT apply this product through any type of irrigation system.
• DO NOT apply this product to edible crops.
• DO NOT apply this product by aerial application.
• Use of this pesticide adjacent to water may affect aquatic organisms. To protect these organisms, DO NOT apply this pesticide within 25 ft. of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds.
• DO NOT make outdoor broadcast applications to turf and ornamentals when wind speed is 15 mph or greater.
• In the state of New York, DO NOT apply within 100 ft. of coastal marshes or streams that drain into coastal marshes.

Mixing Instructions
OPTIMATE CS is to be mixed with water and may be used in all types of standard application equipment. Fill applicator tank with the desired volume of water and add OPTIMATE CS. It is suggested that the water be 5 - 7 pH. Adjust water pH with a buffering agent if necessary. Slowly add OPTIMATE CS to applicator tank water with maximum agitation. Close and shake or reagitate applicator tank before use if application is interrupted. Make up only amount of treatment volume as required.

Tank Mixing
OPTIMATE CS may be tank mixed with other currently registered pesticides unless expressly prohibited by the product label. A small volume mixing test with the other products is recommended to ensure compatibility. If other chemicals are added to the applicator tank, OPTIMATE CS should be added last. Fill tank to desired volume and continue to agitate while making applications. If mixed with EC formulations, use within 24 hours.

Observe all restrictions and precautions which appear on the labels of these products.

INSECT CONTROL on ORNAMENTAL PLANTS
OPTIMATE CS is for use to control the pests listed in the table below in such areas as residential landscaped areas and landscaped areas around institutional, public, commercial and industrial buildings, parks, recreational areas, and athletic fields (including trees, shrubs, flowers, evergreens, foliage plants and groundcovers).
NOTE: While phytotoxicity testing has been carried out on a wide range of ornamental plants under various environmental conditions, and no phytotoxicity has been observed, certain cultivars may be sensitive to the final spray solution. It is advised to prespray a selection of ornamental plants and observe them for 7-10 days prior to treating large areas if local use experience is unavailable.

RESTRICTIONS:
• DO NOT apply more than 0.18 lbs. of the a.i. (46.1 fl. ozs. of concentrate) per acre per year.
### Tank Dilution Rates for Ornamental Pests

<table>
<thead>
<tr>
<th>Pest</th>
<th>Amount Of OPTIMATE CS</th>
<th>Application Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ants (including Imported fire Ants)</td>
<td>1.3-4.4 fl. oz. per 100 gals. or 39-132 mL per 100 gals.</td>
<td>Application to ornamentals should be started prior to the establishment of high insect pest populations. Apply at 7-day intervals if retreatment is necessary. Limit more frequent treatment to spot treatments. Good spray coverage is necessary to provide the most effective level of control. Addition of a spreader-sticker at recommended rates may enhance the control of insects on certain species of ornamentals having waxy, hard to wet foliage. For spot treatments use 0.44 fl. oz. OPTIMATE CS per 1 - 2.5 gals. of water.</td>
</tr>
<tr>
<td>Azalea caterpillars</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aphids</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bagworms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black vine weevils (adult)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boxelder bugs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Budworms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>California oakworms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cankerworms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cockroaches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crickets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pest</td>
<td>Amount Of OPTIMATE CS</td>
<td>Application Instructions</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-----------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Cutworms</td>
<td>1.3-4.4 fl. oz. per 100 gals. or 39 - 132 mL per 100 gals.</td>
<td>Consult your state university or local Cooperative Extension Service office for specific pest control application timing in your area.</td>
</tr>
<tr>
<td>Eastern tent caterpillars</td>
<td></td>
<td><strong>Scale</strong>: Thoroughly cover the plant with OPTIMATE CS spray, including trunks, stems, twigs, and foliage for control of scale insects (crawler stage).</td>
</tr>
<tr>
<td>Elm leaf beetles</td>
<td></td>
<td><strong>Bagworm</strong>: Apply OPTIMATE CS when bagworm larvae begin to hatch. Spray directly on the larvae. Application is the most effective when the larvae are young.</td>
</tr>
<tr>
<td>European sawflies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall webworms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flea beetles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forest tent caterpillars</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gypsy moth larvae</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japanese beetles (adults)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>June beetles (adults)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lace bugs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leaf-feeding caterpillars</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leafhoppers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leafminers (adults)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(continued)
<table>
<thead>
<tr>
<th>Pest</th>
<th>Amount Of OPTIMATE CS</th>
<th>Application Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leaf rollers</td>
<td>1.3-4.4 fl. oz. per 100 gals.</td>
<td></td>
</tr>
<tr>
<td>Leaf skeletonizers</td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Midge</td>
<td>39 - 132 mL per 100 gals.</td>
<td></td>
</tr>
<tr>
<td>Mosquitoes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oleander moth larvae</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillbugs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pine sawflies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pine shoot beetles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pinetip moths</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plant bugs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Root weevils</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawflies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scale insects (crawlers)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spiders</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(continued)
<table>
<thead>
<tr>
<th>Pest</th>
<th>Amount Of Optimate CS</th>
<th>Application Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spittlebugs</td>
<td>1.3-4.4 fl. oz. per 100 gals. or 39 - 132 mL per 100 gals.</td>
<td></td>
</tr>
<tr>
<td>Striped beetles</td>
<td>2.6 - 4.4 fl. oz. per 100 gals. or 78 - 132 mL per 100 gals.</td>
<td></td>
</tr>
<tr>
<td>Striped oakworms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thrips</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tip moths</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tussock moth larvae</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wasps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broadmites</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brown softscales</td>
<td></td>
<td></td>
</tr>
<tr>
<td>California redscales (crawlers)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clover mites</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mealybugs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pine needle scales (crawlers)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spider mites</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whiteflies</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**OPTIMATE CS Mixing Chart for Ornamental Insect Pest Control**

(OPTIMATE CS to add per spray tank)

<table>
<thead>
<tr>
<th>Rate of OPTIMATE CS</th>
<th>25 Gals.</th>
<th>50 Gals.</th>
<th>100 Gals.</th>
<th>200 Gals.</th>
<th>300 Gals.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.32 oz. (^1)</td>
<td>0.30 oz.</td>
<td>0.70 oz.</td>
<td>1.32 oz.</td>
<td>2.6 oz.</td>
<td>3.96 oz.</td>
</tr>
<tr>
<td>2.64 oz. (^2)</td>
<td>0.70 oz.</td>
<td>1.30 oz.</td>
<td>2.64 oz.</td>
<td>5.3 oz.</td>
<td>7.92 oz.</td>
</tr>
<tr>
<td>4.4 oz. (^3)</td>
<td>1.10 oz.</td>
<td>2.20 oz.</td>
<td>4.40 oz.</td>
<td>8.8 oz.</td>
<td>13.2 oz.</td>
</tr>
</tbody>
</table>

\(^1\) Equivalent to 3.2 mL per 1,000 sq. ft. (4.7 oz. per acre) when applied at 8 gal. per 1,000 sq. ft.

\(^2\) Equivalent to 6.3 mL per 1,000 sq. ft. (9.3 oz. per acre) when applied at 8 gal. per 1,000 sq. ft.

\(^3\) Equivalent to 10.6 mL per 1,000 sq. ft. (15.6 oz. per acre) when applied at 8 gal. per 1,000 sq. ft.
LAWN/TURFGRASS INSECT PEST CONTROL

OPTIMATE CS is for use to control the pests listed in the table below around such areas as residential, institutional, public, commercial and industrial buildings, parks, recreational areas and athletic fields.

RESTRICTIONS:

• KEEP CHILDREN AND PETS OFF TREATED AREAS UNTIL SPRAY HAS DRIED FOLLOWING APPLICATION.

• DO NOT apply when turfgrass is waterlogged or when soils are saturated with water (i.e. will not accept irrigation).

• DO NOT apply more than 0.18 lbs. of a.i. (46.1 fl. oz. of concentrate) per acre per year.
### RATES FOR LAWN AND TURFGRASS PESTS

<table>
<thead>
<tr>
<th>Pest</th>
<th>Amount Of OPTIMATE CS*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ants (Including Import Fire Ants)</td>
<td>3.0 – 6.1 mL per 1,000 sq. ft.</td>
</tr>
<tr>
<td>Armyworms</td>
<td>3.0 – 6.1 mL per 1,000 sq. ft.</td>
</tr>
<tr>
<td>Centipedes</td>
<td>3.0 – 6.1 mL per 1,000 sq. ft.</td>
</tr>
<tr>
<td>Crickets</td>
<td>3.0 – 6.1 mL per 1,000 sq. ft.</td>
</tr>
<tr>
<td>Cutworms</td>
<td>3.0 – 6.1 mL per 1,000 sq. ft.</td>
</tr>
<tr>
<td>Earwigs</td>
<td>3.0 – 6.1 mL per 1,000 sq. ft.</td>
</tr>
<tr>
<td>Fleas (adult)</td>
<td>3.0 – 6.1 mL per 1,000 sq. ft.</td>
</tr>
<tr>
<td>Grasshoppers</td>
<td>3.0 – 6.1 mL per 1,000 sq. ft.</td>
</tr>
<tr>
<td>Japanese beetles (adult)</td>
<td>3.0 – 6.1 mL per 1,000 sq. ft.</td>
</tr>
<tr>
<td>Mites</td>
<td>3.0 – 6.1 mL per 1,000 sq. ft.</td>
</tr>
<tr>
<td>Mosquitoes (adult)</td>
<td>3.0 – 6.1 mL per 1,000 sq. ft.</td>
</tr>
<tr>
<td></td>
<td>or 4.4 – 8.8 fl. oz. per acre</td>
</tr>
</tbody>
</table>

**Application Instructions**

- Application to turf should be started prior to the establishment of high insect pest populations and significant turf damage. To keep pest populations under control, using higher rates as pest pressure increases.
- Apply at 7-day intervals if retreatment is necessary. More frequent treatments should be limited to spot treatments.
- For **spot treatments**, use 0.20 fl. oz. of **OPTIMATE CS** per 1 - 2.5 gals. of water.

**Surface Insect Control** (armyworm, cutworms, fleas, etc.): Apply **OPTIMATE CS** at recommended rates in 2 - 5 gals. of water per 1,000 sq. ft. The use of a spreader-sticker...
<table>
<thead>
<tr>
<th>Pest</th>
<th>Amount Of OPTIMATE CS*</th>
<th>Application Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pillbugs</td>
<td>3.0 – 6.1 mL per 1,000 sq. ft. or 4.4 – 8.8 fl. oz. per acre</td>
<td>may be useful if high rainfall amounts are forecast, otherwise the addition of adjuvants is not necessary under normal conditions for surface insect control in turf. Delay watering or mowing for 12 - 24 hours to control surface-feeding insect pests.</td>
</tr>
<tr>
<td>Sod webworms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sow bugs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ticks (including species which transmit Lyme disease)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bluegrass billbugs (adult)</td>
<td>6.1 mL per 1,000 sq. ft. or 8.8 fl. oz. per acre</td>
<td><strong>Thatch Inhabiting Insect Control (chinch bugs, billbugs, etc.):</strong> Apply OPTIMATE CS at recommended rates in 2 - 10 gals. of water per 1,000 sq. ft. The use of a nonionic wetting agent, penetrant or similar adjuvant is recommended at label rates. Lightly irrigate after application with up to 1/2 inch of water to move the OPTIMATE CS into the thatch layer. If irrigation is not available, then use high water application rates.</td>
</tr>
<tr>
<td>Black turfgrass ataenius (adult)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chiggers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fleas (adult)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grubs (suppression)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hyperodes weevil (adult)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: (continued)
<table>
<thead>
<tr>
<th>Pest</th>
<th>Amount Of OPTIMATE CS*</th>
<th>Application Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mole crickets (nymphs and young adults)</td>
<td>6.1 mL per 1,000 sq. ft or 8.8 fl. oz. per acre</td>
<td><strong>Subsurface Insect Control (mole crickets, grubs, etc.):</strong> Apply OPTIMATE CS at recommended rates in 4 - 10 gals. of water per 1,000 sq. ft. The use of a nonionic wetting agent, penetrant or similar adjuvant is strongly recommended following label rates. Use the highest water application rates possible with your sprayer. Apply OPTIMATE CS to turf wet with dew, rain or irrigation. Water-in immediately after application with ¼ - ½ inch of water.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Fire Ant Control:</strong> Treat individual mounds with a drench application using a watering can. Use 0.20 fl. oz. of OPTIMATE CS per 2.5 gals. of water. Thoroughly soak each mound and a 3 ft. diameter circle around each mound. Gently apply the mixture to avoid disturbing the mound. Disturbing</td>
</tr>
</tbody>
</table>

(continued)
<table>
<thead>
<tr>
<th>Pest</th>
<th>Amount Of OPTIMATE CS*</th>
<th>Application Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6.1 mL per 1,000 sq. ft or 8.8 fl. oz. per acre</td>
<td>the mound may cause the ants to migrate and reduce the effectiveness of the treatment. Apply in early morning or late evening hours. You may make applications on a monthly basis to maintain protection of treated areas.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Mosquito Control:</strong> Apply as a general spray around landscape plantings, turf, and building foundations to control mosquitoes. Apply OPTIMATE CS at recommended rates in 2-5 gals. of water per 1,000 sq. ft.</td>
</tr>
</tbody>
</table>

1 Not for use on mature adult mole crickets and chinch bugs in New York state.

* Example: To treat the listed turf pests at the 3.5 mL per 1,000 sq. ft. rate, determine the gallons of dilution per 1,000 sq. ft. needed to adequately cover the turf. At a 5 gallon per 1,000 sq. ft. dilution, take the 3.5 mL and divide it by the 5 (gallon) to get 0.7 mL to be added per gallon. For a 50 gallon tank, therefore, this would be 0.7 mL X 50 = 35 mL (or 1.25 oz.) in 50 gallons of water.

Conversion Rate 1 fluid ounce (fl. oz) equals 29 milliliters (mL)
### OPTIMATE CS Mixing Chart for Turf Insect Pest Control

(OPTIMATE CS to add per 100 gal. spray tank)

<table>
<thead>
<tr>
<th>Rate of OPTIMATE CS</th>
<th>Application Rate Per 1,000 Square Feet of Turf</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 gal.</td>
</tr>
<tr>
<td>4.4 oz per ac</td>
<td>5.1</td>
</tr>
<tr>
<td>6.6 oz per ac</td>
<td>7.6</td>
</tr>
<tr>
<td>8.8 oz per ac</td>
<td>10.1</td>
</tr>
</tbody>
</table>

Conversion Rate: 1 fluid ounce (fl. oz.) equals 29 milliliters (mL).
INTEGRATED PEST AND RESISTANCE MANAGEMENT

Many insects have demonstrated the ability to develop resistance to insecticides. Frequent exposure of flies and other insects to a single class of insecticide may lead to the development of resistance to that class of insecticide. The following resistance management strategy will help ensure the prolonged usefulness of this and other conventional insecticides.

• Use **OPTIMATE CS** insecticide and other insecticides only according to label directions.
• Do not use less than the labeled rate of any insecticide.
• Include multiple cultural and/or biological controls within an Integrated Pest Management Program.
• Rotate **OPTIMATE CS** insecticide with other classes of insecticide (naturalytes, phenyl pyrazoles, chloronicotinyls, and organophosphates, etc.) during an insect pest season.

For advice concerning integrated pest management practices in relation to local conditions, consult resources in resistance management programs, or your Cooperative Agricultural Extension Service.
## Storage and Disposal

Do not contaminate water, food, or feed by storage and disposal.

**Pesticide Storage:** Store in original containers only. Keep container closed when not in use. Do not store near food or feed. Do not store near heat or open flame. **Do not allow product to freeze.**

In case of spill or leak on floor or paved surfaces, soak up with sand, earth or synthetic absorbent. Remove to chemical waste area.

**Pesticide Disposal:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If wastes cannot be disposed of according to label directions, contact your State Pesticide or Environmental Control Agency, or Hazardous Waste representative of the nearest EPA Regional Office for guidance. Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

**Nonrefillable Containers 5 gallons or less:**

**Container Disposal:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.
Terms and Conditions of Use
If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies.

Warranty Disclaimer
Control Solutions Inc. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. To the extent consistent with applicable law, Control Solutions Inc. MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Inherent Risks of Use
It is impossible to eliminate all risks associated with use of this product. Lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Control Solutions Inc. or the seller. All such risks shall be assumed by buyer.
**Limitation of Remedies**

To the extent consistent with applicable law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Control Solution Inc's election, one of the following:

1. Refund of purchase price paid by buyer or user for product bought, or
2. Replacement of amount of product used

To the extent consistent with applicable law, Control Solutions Inc. shall not be liable for losses or damages resulting from handling or use of this product unless Control Solutions Inc. is promptly notified of such loss or damage in writing. To the extent allowed by law, Control Solutions Inc. shall not be liable for special, indirect or consequential damages resulting from the use or handling of this product.

The terms of the Warranty Disclaimer, Inherent Risks of Use, and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Control Solutions Inc. or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.
OPTIMATE® CS
Controlled Release Insecticide
A microencapsulated insecticide for use on and around buildings and structures for the control of listed pests.

Storage and Disposal
Do not contaminate water, food, or feed by storage and disposal.
Pesticide Storage: Store in original containers only. Keep container closed when not in use. Do not store near food or feed. Do not store near heat or open flame. Do not allow product to freeze.
In case of spill or leak on floor or paved surfaces, soak up with sand, earth or synthetic absorbent. Remove to chemical waste area.
Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If wastes cannot be disposed of according to label directions, contact your State Pesticide or Environmental Control Agency, or Hazardous Waste representative of the nearest EPA Regional Office for guidance. Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.
Nonrefillable Containers 5 gallons or less:
Container Disposal: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.
Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

EPA Reg. No. 67760-104-53883 EPA Est. No. 53883-TX-02
Manufactured for:
Control Solutions, Inc.
5903 Genoa-Red Bluff • Pasadena, TX 77507-1041
EPA 072412/REVA
1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT: Optimate CS
EPA Reg. No. 279-3612-53883

Product Use: Insecticide

COMPANY IDENTIFICATION:
Control Solutions, Inc.
5903 Genoa Red Bluff
Pasadena, TX  77507
Phone #: (281) 892-2500 (8:00 AM to 5:00 PM CST, Monday to Friday)
Emergency Telephone #: 1-866-897-8050
(24 Hr. Chemtrec Number)

2. HAZARDOUS IDENTIFICATIONS:

GHS Signal Word: Warning

Classification:

<table>
<thead>
<tr>
<th>Health</th>
<th>Environmental</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity – Inhalation – Cat 4</td>
<td>Aquatic Toxicity – Acute 1</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Skin irritation – Cat 2</td>
<td>Aquatic Toxicity – Chronic 1</td>
<td></td>
</tr>
<tr>
<td>Eye irritation – Cat 2B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sensitization – Skin – Cat 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Precautionary Statements:

Prevention:
- Wash hands thoroughly after handling.
- Avoid breathing mist, vapors or spray.
- Use only outdoors or in a well-ventilated area.
- Contaminated work clothing must not be allowed out of the workplace.
- Wear protective gloves.
- Avoid release to the environment.

Response:
- If inhaled: Remove victim to fresh air and keep comfortable for breathing. Call poison control center or doctor if you feel unwell.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.
- If on skin: Wash with plenty of water. See label for specific treatment.
- If skin irritation or rash occurs: Get medical advice and attention.
- Wash contaminated clothing before reuse.
- Collect spillage.

Storage:
- Not applicable.

Disposal:
- Dispose of contents/container in accordance with label instructions.

3. COMPOSITION/INFORMATION ON INGREDIENTS:

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CAS NUMBER</th>
<th>W/W%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gamma-Cyhalothrin: (R)-cyano(3-phenoxyphenyl)methyl (1R,3R)-3-3[(1Z)-2-chloro-3,3,3-076703-62-3</td>
<td>5.9</td>
<td></td>
</tr>
</tbody>
</table>
trifluoroprop-1-enyl-2,2-dimethylcyclopropanecarboxylate

<table>
<thead>
<tr>
<th>Balance, Total, Including:</th>
<th>94.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aromatic Solvent</td>
<td>064742-94-5</td>
</tr>
<tr>
<td>Contains Naphthalene</td>
<td>000091-20-3</td>
</tr>
<tr>
<td>Cellulose</td>
<td>009004-34-6</td>
</tr>
</tbody>
</table>

4. FIRST AID:

**EYE:** Flush eyes thoroughly with water for several minutes. Remove contact lenses after initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

**SKIN:** Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing and shows while washing. Seek medical attention if irritation persists. Items which cannot be decontaminated, including leather articles such as shoes, belts, and watchbands should be disposed of properly.

**INGESTION:** Do not induce vomiting. Call a physician and/or transport to emergency facility immediately.

**INHALATION:** Move person to fresh air. If not breathing give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility.

**NOTE TO PHYSICIAN:** If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. The decision of whether to induce vomiting or not should be made by a physician. Skin contact may aggravate preexisting dermatitis. Topical application of Vitamin E oil to skin following decontamination may relieve persistent stinging. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIRE FIGHTING MEASURES:

**FLASH POINT:** >212°F (>100°C)

**AUTO-IGNITION TEMPERATURE:** <750°F (<400°C)

**FLAMMABLE LIMITS**
- LFL: Not determined
- UFL: Not determined

**EXTINGUISHING MEDIA:** Dry chemical or carbon dioxide for small fires, and water spray or foam for large fires.

**FIRE AND EXPLOSION HAZARDS:** Foam fire extinguishing system is preferred because uncontrolled water can spread possible contamination. Toxic irritating gases may be formed under fire conditions.

**FIRE-FIGHTING EQUIPMENT:** Use positive-pressure, self-contained breathing apparatus and full protective equipment.

6. ACCIDENTAL RELEASE MEASURES:

**ACTION TO TAKE FOR SPILLS:** Absorb small spills with materials such as sand, sawdust, Zorball, or dirt. Wash exposed body areas thoroughly after handling. Report large spills to Cheminova at 866-303-6950.

7. HANDLING AND STORAGE:

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Keep out of reach of children. Do not swallow. Avoid contact with eyes, skin, and clothing. Avoid breathing vapors and spray mist. Handle concentrate in ventilated area. Wash thoroughly with soap and water after handling and before eating, chewing gum, using tobacco, using the toilet or smoking. Keep away from food, feedstuffs, and water supplies. Store in original container with the lid tightly closed.

**INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:** If breathing difficulties occur, seek medical attention. Contact a doctor or hospital immediately if there are signs of poisoning. Explain that the injured person has been exposed to a pyrethroid insecticide and describe condition and the extent of exposure. Remove exposed person from area where the product is available.
These precautions are suggested for conditions where the potential for exposure exists. Emergency conditions may require additional precautions.

**EXPOSURE GUIDELINES:**

Aromatic Petroleum Solvent: None established.
Supplier recommends a guideline of 100 ppm for the total product, which is a mixture of aromatic hydrocarbons.
Naphthalene: ACGIH TLV is 10 ppm TWA, 15 ppm STEL, Skin, A4. OSHA PEL is 10 ppm TWA.
Cellulose: ACGIH TLV is 10 mg/M\(^3\). OSHA PEL is 15 mg/M\(^3\) respirable.

A “skin” notation following the exposure guideline refers to the potential for dermal absorption of the material including mucous membranes and the eyes either by contact with vapors or by direct skin contact. It is intended to alert the reader that inhalation may not be the only route of exposure and that measures to minimize dermal exposures should be considered.

**ENGINEERING CONTROLS:** Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

**RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:**

**EYE/FACE PROTECTION:** Use chemical goggles.

**SKIN PROTECTION:** Use gloves chemically resistant to this material.

**RESPIRATORY PROTECTION:** Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required, use a NIOSH approved air-purifying or positive-pressure supplied-air respirator depending on the potential airborne concentration. For emergency and other conditions where the exposure guideline may be exceeded, use a NIOSH approved positive-pressure self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply.

**APPLICATORS AND ALL OTHER HANDLERS:** Refer to the product label for personal protective clothing and equipment.

9. **PHYSICAL AND CHEMICAL PROPERTIES:**

| **APPEARANCE:** Beige liquid |
| **ODOR:** Slight |
| **ODOR THRESHOLD:** Not established |
| **pH:** Not established |
| **MELTING POINT/FREEZING POINT:** Below 0\(^\circ\) C |
| **INITIAL BOILING POINT AND BOILING RANGE:** Not applicable (decomposes) |
| **FLASH POINT:** >212\(^\circ\) F (>100\(^\circ\) C) |
| **EVAPORATION RATE:** Not established |
| **FLAMMABILITY:** Not applicable |
| **UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS:** Not applicable |
| **VAPOR PRESSURE:** GAMMA-CYHALOTHIN: 7.73 x 10\(^{-10}\) mmHg @ 20\(^\circ\) C; 2.59 x 10\(^{-9}\) mmHg @ 25\(^\circ\) C |
| **VAPOR DENSITY:** Not established |
| **LIQUID DENSITY:** 8.42 lbs/gal |
| **SPECIFIC GRAVITY:** ~1.01 g/ml @ 22\(^\circ\) C |
| **SOLUBILITY:** In water – disperses in water (aqueous suspension) |
| **SOLUBILITY(IES): GAMMA-CYHALOTHIN:**
  - Acetone >500 g/l
  - Dichloromethane >500 g/l
  - Methanol >500 g/l
  - Diethyl ether >500 g/l
  - Ethyl acetate >500 g/l
  - Hexane >500 g/l
  - Toluene >500 g/l |
| **PARTITION COEFFICIENT (N-OCTANOL/WATER):**
  - GAMMA-CYHALOTHIN: LOG K\(_{ow}\) = 6.8 |
| **AUTO-IGNITION TEMPERATURE:** <750\(^\circ\) F (<400\(^\circ\) C) |
| **DECOMPOSITION TEMPERATURE:** GAMMA-CYHALOTHIN: 275\(^\circ\) C |
| **VISCOSITY:** Not established |

10. **STABILITY AND REACTIVITY:**

**STABILITY:** (CONDITIONS TO AVOID) Stable under normal use and storage conditions.

**INCOMPATIBILITY:** (SPECIFIC MATERIALS TO AVOID) Oxidizing agents.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide, hydrogen chloride, hydrogen fluoride, nitrogen oxides, hydrogen cyanide, and various chlorinated and fluorinated organic compounds.

**HAZARDOUS POLYMERIZATION:** Not known to occur.
11. TOXICOLOGICAL INFORMATION:

POTENTIAL HEALTH EFFECTS: This section includes possible adverse effects, which could occur if this material is not handled in the recommended manner.

EYE: May cause moderate eye irritation. Corneal injury unlikely.

SKIN: Brief contact may cause slight skin irritation with local redness. May cause drying and flaking of the skin. Prolonged skin contact is unlikely to result in absorption of harmful amounts. The LD₅₀ for skin absorption in rats for a similar material is >5000 mg/kg. Similar materials have been shown to cause allergic skin reactions when tested in guinea pigs.

INGESTION: Low toxicity if swallowed. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia. The oral LD₅₀ for rats for a similar material is between >2500 mg/kg.

INHALATION: Prolonged excessive exposure may cause serious effects. May cause central nervous system effects.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: For the active ingredient, excessive exposure may cause neuralgic signs and symptoms. For the solvent, in animals, effects have been reported on the following organs: respiratory tract, gastrointestinal tract, thyroid, and urinary tract.

CANCER INFORMATION: Contains naphthalene, which has caused cancer in some laboratory animals.

TERATOLOGY (BIRTH DEFECTS): The active ingredient did not cause birth defects or other effects in the fetus even at doses which caused toxic effects in the mother. The solvent did not cause birth defects or any other fetal effects in laboratory animals.

REPRODUCTIVE EFFECTS: For the active ingredient, in animal studies done on a similar material, has been shown not to interfere with reproduction.

MUTAGENICITY: For the active ingredient and solvent, in-vitro and animal genetic toxicity studies were negative.

12. ECOLOGICAL INFORMATION:

ENVIRONMENTAL FATE:

MOVEMENT & PARTITIONING: Based largely or completely on information for the active ingredient and the aromatic solvent.

DEGRADATION & PERSISTENCE: Based largely or completely on information for the aromatic solvent.

ECOTOXICOLOGY: Based largely or completely on information for a similar material.

Material is very highly toxic to aquatic organisms on an acute basis (LC₅₀ or EC₅₀ is <0.1 mg/L in the most sensitive species tested).

13. DISPOSAL CONSIDERATIONS:

DISPOSAL METHOD: If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION:

U.S. DEPARTMENT OF TRANSPORTATION (DOT) INFORMATION:

For all shipments less than 17857 pounds by all modes of transportation:

This material is not regulated for transport.

For shipments of 17857 pounds or greater by all modes of
SAFETY DATA SHEET

OPTIMATE CS

Effective Date: 07/01/2016

transportation:
ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S./(NAPHTHALENE)/9/UN3082/PG III/RQ (NAPHTHALENE)

15. REGULATORY INFORMATION:

NOTICE: The information herein is presented in good faith and believed to be accurate as of effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer’s responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations.

U.S. REGULATIONS

FIFRA: 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 on safety data sheets, and for workplace labels on non-pesticide chemicals. Following is the hazard information as required on the pesticide label:
CAUTION
Causes moderate eye irritation.
Harmful if swallowed.
Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.
Avoid contact with eyes, skin, or clothing.

SARA 313 INFORMATION: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

CHEMICAL NAME   CAS NUMBER   CONCENTRATION
Naphthalene     000091-20-3   0.56%

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA “Hazard Categories” promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

An immediate health hazard
A delayed health hazard

CALIFORNIA PROPOSITION 65: The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986:
This product contains chemical(s) known to the State of California to cause cancer. During processing of our product, exposure may exceed the levels deemed to represent significant risk as defined by the emergency guidelines in 22 California Code of Regulations, Division 2, Chapter 3, Article 7. The material is Naphthalene (CAS 000091-20-3)

TOXIC SUBSTANCES CONTROL ACT (TSCA): All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

STATE RIGHT-TO-KNOW: The following product components are cited on certain state lists as mentioned. Non-listed components may be shown in composition section of the MSDS.

CHEMICAL NAME   CAS NUMBER   LIST
NAPHTHALENE     000091-20-3   NJ2 NJ3 PA1 PA3
CELLULOSE       009004-34-6   PA1

NJ2=New Jersey Environmental Hazardous Substance (present at greater than or equal to 1.0%)
NJ3=New Jersey Workplace Hazardous Substance (present at greater than or equal to 1.0%)
PA1=Pennsylvania Hazardous Substance (present at greater than or equal to 1.0%)
PA3=Pennsylvania Environmental Hazardous Substance (present at greater than or equal to 1.0%)

OSHA HAZARD COMMUNICATION STANDARD: This product is a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:
Health 2
Flammability 0
Reactivity 0

COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA, or
SUPERFUND: This product contains the following substance(s) listed as “Hazardous Substances” under CERCLA, which may require reporting of releases:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>RQ</th>
<th>% in Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene</td>
<td>000091-20-3</td>
<td>100</td>
<td>0.56%</td>
</tr>
</tbody>
</table>

RCRA CATEGORIZATION:
U.S. EPA Hazardous Waste #: Naphthalene = U165

16. OTHER INFORMATION:

SDS STATUS: Revised Sections: 1
Replaces MSDS dated: 03/01/2015