

BeetleBlock - VERBENONE

A Repellent Pheromone Product for the Control of the
Mountain Pine Beetle *Dendroctonus ponderosae*, Western Pine Beetle
Dendroctonus brevicomis, Southern Pine Beetle *Dendroctonus frontalis*
and Roundheaded Pine Beetle *Dendroctonus adjunctus*.

Active Ingredient:

Verbenone (4,6,6-trimethyl-bicyclo (3.1.1) hept-3-en-2-one.. 91.49%

Other Ingredients 8.51%

Total 100.00%

Each dispenser contains 6.75 grams of verbenone

The dispenser components constitute approximately 75% of the product's total weight

**Keep Out of Reach of Children
Mantenga Fuera del Alcance de Niños**

**CAUTION
PRECAUCIÓN**

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

**See back panel for First Aid and additional Precautionary Statements
Read All Directions Before Using This Product**

**ChemTica Internacional S.A.
Apdo. 159-2150
San Jose, Costa Rica**

EPA Reg. No. 73813-2

EPA Est. 73813-CRI-1

Contents

- 2 Dispensers containing 0.236 oz (6.75 g) pheromone per dispenser
for a total of 0.472 oz
- 10 Dispensers containing 0.236 oz (6.75 g) pheromone per dispenser
for a total of 2.36 oz
- 100 Dispensers containing 0.236 oz (6.75 g) pheromone per dispenser
for a total of 1 lb 7.6 oz

Batch Number: _____

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 a poison control center or 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 the eye.
- Call a poison control center or doctor for treatment advice.

If on Skin or Clothing

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call poison control center or doctor for treatment advice.

Hot Line Number

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For medical emergencies call the poison control center at 1-800-222-1222. For general information on this product, call the National Pesticides Information Center (NPIC) at 1-800-858-7378 Monday through Friday, 8:00 am to 12:00 pm Pacific time (or <http://npic.orst.edu>).

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION: Harmful if swallowed. Causes moderate eye irritation. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes and 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 before reuse.

Environmental Hazards

For terrestrial uses, do not apply directly to water, or areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of dispensers.

DIRECTIONS FOR USE

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

- 1. Crop:** Lodgepole Pine, Ponderosa Pine, Whitebark Pine, Western White Pine, Southwestern White Pine, Limber Pine, Sugar Pine, Coulter Pine, Monterey Pine, Jack Pine, Red Pine, Jeffery Pine, Scotch Pine, Knobcone Pine, Bristlecone Pine, Bishop Pine, Aleppo Pine, Torrey Pine, Spruce Pine, Digger Pine, Pinion Pine, Pitch Pine, Slash Pine, Longleaf Pine, Shortleaf Pine, Virginia Pine, Pond Pine, Eastern White Pine, Loblolly Pine, Engelmann Spruce, White Spruce, Lutz Spruce, Sitka Spruce and other trees attacked by bark and ambrosia beetles.
- 2. Pest:**

Mountain Pine beetle	- <i>Dendroctonus ponderosae</i>
Southern Pine beetle	- <i>Dendroctonus frontalis</i>
Western Pine beetle	- <i>Dendroctonus brevicomis</i>
Red Turpentine beetle	- <i>Dendroctonus valens</i>
Pine Engraver	- <i>Ips pini</i>
Northern Spruce Engraver	- <i>Ips perturbatus</i>
California Five-spined Ips	- <i>Ips peracofusus</i>
Other bark and ambrosia beetles	
- 3. Application:** BeetleBlock – VERBENONE dispensers are for use in forests, municipal parks and shade tree areas, recreational use areas such as campgrounds, golf courses, parks and parkways, ornamental and shade tree plantings; suburban areas; rights of way and other easements.

Prior to use open foil shipping bag carefully in a well-ventilated area to allow any accumulated vapors to vent. Do not puncture reservoir, staple only through the colored plastic tab at top of dispenser.

BeetleBlock – VERBENONE dispensers are used to prevent or reduce bark beetle attacks on susceptible trees or stands containing a significant portion of pine or spruce trees. BeetleBlock – VERBENONE dispensers emit an anti-aggregation pheromone that is repellent to Mountain Pine beetle, Southern Pine beetle, Western Pine beetle and other conifer infesting beetles.

BeetleBlock – VERBENONE is intended to be used as part of an integrated pest management system. When in doubt about treatment consult a knowledgeable professional (U.S. Forest Service, State Forester, Arborist, Forester) before using BeetleBlock – VERBENONE. For best results remove as many beetle infested trees as possible from the site prior to beetle emergence and deploying BeetleBlock – VERBENONE.

For treatment areas greater than half an acre staple BeetleBlock – VERBENONE dispensers 6-12 feet above the ground, on the north face of susceptible trees in a grid pattern at a minimum of 20 dispensers/acre. Maximum allowable dose is 60 dispensers/acre/year.

For treatment areas between one half and one quarter of an acre, place dispensers at 35 foot intervals around the perimeter and place the remaining dispensers on the north side of the largest diameter trees.

For protection of individual trees, staple at least 2 dispensers on the north face of the tree (maximum 30 trees/acre) with one dispenser at 6 feet and the other at 12 feet above the ground. For trees larger than 14 inches in diameter (at breast height) use four dispensers stapled to the tree in four cardinal directions (maximum 15 trees/acre). When using four dispensers per tree, alternate the height of adjacent dispensers, two at 6 feet and two at 12 feet above the ground.
- 4. Timing:** Deploy the dispensers before initial beetle flight, usually May-June.
- 5. Notes:**
 - i. If more than 20% of trees are infested, repellence may be less effective.
 - ii. Treating larger areas gives a geometrical advantage in so far that beetles repelled from the area will attempt to fly out of the treatment zone and hence the larger the treated area the more beetles are likely to exhaust and die.

Storage and Disposal

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

Pesticide Storage: Store in original container, in cool, dry area at 75°F (25°C) or below.

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

Container Handling: Nonrefillable container. Do not reuse or refill this container. Completely empty shipping bag, then offer for recycling if available. Dispose of empty bag and exhausted dispensers in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning; if burned stay out of smoke.

Warranty

ChemTica Internacional S.A. warrants that this product conforms to the chemical description on the label. To the extent consistent with applicable law, ChemTica Internacional S.A. neither makes nor authorizes any agent or representative to make any other warranty of fitness or of merchantability, guarantee or representation, express or implied, concerning this material. To the extent consistent with applicable law, ChemTica Internacional S.A.'s maximum liability for breach of this warranty shall not exceed the purchase price of the product. To the extent consistent with applicable law, Buyer and user acknowledge and assume all risks and liabilities resulting from the handling, storage and use of this product.