#### **Synergy Shield MCH**

ANTIAGGREGATION PHEROMONE CONTROLLED RELEASE DEVICE TO DETER ATTACK BY DOUGLAS-FIR BEETLES, Dendroctonus pseudotsugae, AND SPRUCE BEETLES, Dendroctonus rufipennis, ON DOUGLAS-FIR AND SPRUCE TREES COMMERCIAL

> Insect Repellent Controlled Release Device

ACTIVE INGREDIENT: MCH (3-methyl-2-cyclohexen-1-one)... 97.0 %

## REGISTRATION NO. 32922 P.C.P.ACT

# CAUTION



## POISON

# EYE AND SKIN IRRITANT

## KEEP OUT OF REACH OF CHILDREN AND PETS

Net Contents: 10 units; (10g) (1g) per unit 50 units; (50g) (1g) per unit 100 units; (100g) (1g) per unit Each unit contains 1 g of 3-methyl-2-cyclohexen-1-one (MCH)

#### READ THE LABEL BEFORE USING

DO NOT puncture reservoir or handle their contents

Synergy Semiochemical Corporation 7572 Progress Way, Delta, BC, V4G 1E9 Canada 604-454-1122

# **DIRECTIONS FOR USE:**

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests.

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by disposal of unused or used dispensers.

### **Host Trees**

Standing and fallen Douglas-fir and spruce trees and stumps, and stands containing Douglas-fir or spruce trees. May be used on log storage decks.

#### Pests

MCH is an antiaggregation pheromone for Douglas-fir beetle, *Dendroctonus pseudotsugae*, and Spruce beetle, *Dendroctonus rufipennis*. Synergy Shield MCH deters mass attack by these pests.

## **Rate and Application**

For best results remove or destroy all beetle-infested trees in treatment area well before application. Site specific details are important; it is especially useful to know infestation levels in adjacent stands, direction of beetle migration and prevailing winds as insects can only sense the pheromone from a downwind position. Stand age, composition, aspect, elevation, latitude, and local weather are indicators of the stand susceptibility to beetle attack. Product is optimally used as an integrated pest management tool in part of a long term resource management plan, which may require repeated treatments over successive years. Inexperienced users are advised to seek guidance from a forest entomologist.

Placement on trees:

Place Synergy Shield MCH at a minimum height of 2.5 m on the north face of trees 20 cm diameter or larger. Orientation of the bubble against the tree is not critical. Staple anywhere in the blank plastic flashing, DO NOT PUNCTURE RESERVOIR. Where beetle populations are extreme add one more Synergy Shield MCH for each additional 20 cm diameter 1 m above the previous Synergy Shield MCH (e.g., a 50 cm diameter tree will have 2 Synergy Shield MCH, placed at a minimum height of 2.5 m and at 3 -4 m height).

Treed areas less than 1 ha:

Place 1 or 2 Synergy Shield MCH on all trees over 20 cm diameter, the number per tree dependent upon diameter and risk of attack.

Forested stands over 1 ha:

Place one Synergy Shield MCH/tree in a grid pattern.

Minimum dose, for low beetle risk – 50 Synergy Shield MCH/ha Typical dose, for moderate beetle risk – 80 Synergy Shield MCH/ha High dose, for high beetle risk – 120 Synergy Shield MCH/ha Stumps, windthrown trees and log decks:

Each stump, windthrown tree or log deck must be treated to prevent population build-up as these are preferred hosts. Place one Synergy Shield MCH on north face of each stump. Horizontal trees or log decks, place up to 4 Synergy Shield MCH, depending on tree size, at 6 m intervals on shady side of the log or deck.

#### Extensive windthrow:

For large areas of windthrow (over 1 ha) where treating every tree is not feasible, place Synergy Shield MCH in a grid pattern at a dose of 120 Synergy Shield MCH/ha.

Maximum Dose: 150 Synergy Shield MCH/ha.

Additional Synergy Shield MCH up to a total of 150/ha may be utilized on the perimeters of treatment areas, small stands or areas of high value trees, or high risk zones to help minimize beetle encroachment to the treated area.

#### Timing

Apply 2 weeks prior to the expected flight of the pest, typically this is April-May. The expected lifespan of Synergy Shield MCH is weather dependent, but typically a minimum of 60 days. Occasionally a second treatment may be necessary for a prolonged or late beetle flight, especially at high elevations.

### PRECAUTIONS

#### KEEP OUT OF REACH OF CHILDREN

Do not apply this product in a way that will contact workers or other persons directly. Only protected handlers may be in the area during placement on trees. Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wash skin and clothing thoroughly with soap and water after handling. Avoid contact with active (liquid) ingredients; do not puncture Synergy Shield MCH. Avoid inhaling fumes; open storage bag outdoors prior to use and allow venting for 10 minutes before removing Synergy Shield MCH. Users must wear suitable protective clothing including chemical resistant gloves and eye protection when handling the dispensers. Wash hands with soap and water after use. Do not contaminate irrigation water supplies or aquatic habitats by cleaning equipment or disposal of wastes.

Applications are limited to woodlots, forests and sawmill yards. **DO NOT** apply near or in areas frequented by small children and companion animals (e.g., residential lots, parks, camping sites, resorts and scenic vistas).

#### FIRST AID

If swallowed: Call a poison control centre 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 centre or doctor. DO NOT give anything by mouth to an unconscious person. If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice.

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 centre 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, preferable by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

# **TOXICOLOGICAL INFORMATION:** Treat symptomatically.

# STORAGE

Store Synergy Shield MCH in sealed storage bag (provided). Store below 0 °C or as cold as possible.

# DISPOSAL

Discard used dispensers in garbage.

For information on disposal of unused or unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

### NOTICE TO USER

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

Please include a label for each dispenser (unit) with the following details:

Dispenser (unit)

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