SmartBlock[®]

LIQUID

FOR THE CONTROL OF SPROUTING OF POTATOES IN STORAGE

For Indoor Use Only

COMMERCIAL

REGISTRATION NO. 30889 PEST CONTROL PRODUCTS ACT

CAUTION



POISON

CAUTION – EYE IRRITANT

DANGER – SKIN IRRITANT

READ THE LABEL BEFORE USING

AMVAC CHEMICAL CORPORATION

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> Distributed by : AG-SERVICES INC. P.O Box 1121 Mitchell ON N0K 1N0 866-890-4990

> > NET CONTENTS: 946 mL - 208 L

FOR USE WITH THERMAL FOGGING EQUIPMENT ONLY

General:

SmartBlock[®] controls sprouting by damaging or destroying the growing meristem of sprouting ("peeping") potato tubers and blackening sprouts. Sprouting is controlled for 1-3 months, depending on potato variety and storage temperatures

PRECAUTIONS: KEEP OUT OF REACH OF CHILDREN Harmful if inhaled. Avoid inhaling. May irritate eyes. Avoid contact with eyes. Severely irritating to skin. DO NOT get on skin.

- Do not make applications to potatoes in the field.
- Do not use or allow the product to contact seed potatoes. However, seed potatoes can be safely stored in potato storage areas which were previously treated with **SmartBlock**[®] only after full ventilation and clean out procedures have been followed. The air system including ducts, plenums and the storage building itself must be thoroughly ventilated prior to storing seed potatoes.
- Follow all application equipment manufacturers' use directions.

Loaders and other handlers and those involved in clean-up and maintenance activities must wear personal protective equipment (PPE) including a long-sleeved shirt, long pants, shoes, socks, respirator with a NIOSH/MSHA approved organic vapour-removing cartridge with a pre-filter approved for pesticides, goggles, and chemical resistant gloves.

Avoid contact with eyes, skin or clothing.

Wash skin thoroughly with soap and water after handling.

Remove contaminated clothing and wash clothing before reuse.

Avoid breathing vapours or fog.

Allow the treated area to ventilate for at least 24 hours or until ventilation is complete (a minimum of 5 air exchanges for facilities that are equipped with an air exchange system) before allowing workers to enter for normal activities.

For re-entry into treated areas prior to complete ventilation for emergencies only, workers must wear coveralls over long-sleeved shirt, long pants, shoes, socks, chemical resistant (such as nitrile or butyl) gloves, and a self-contained breathing apparatus or full-face respirator with a NIOSH/MSHA approved organic vapour removing cartridge with a pre-filter approved for pesticides.

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 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 centre or doctor for further 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.

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

TOXICOLOGICAL INFORMATION:

Treat symptomatically.

STORAGE:

To prevent contamination store this product away from food or feed.

Keep in original container during storage. Store product in a cool, dry, well ventilated place away from seed, feed, fertilizer, or other pesticides. Keep away from fire or open flame, or other source of heat.

DISPOSAL:

- 1. Follow provincial instruction for any required additional cleaning of the container prior to its disposal.
- 2. Make the empty container unsuitable for further use.
- 3. Dispose of the container in accordance with provincial requirements.
- 4. For information on disposal of unused, 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

DIRECTIONS FOR USE

SmartBlock[®] can effectively leverage the natural dormancy of potatoes when used according to label directions. **SmartBlock**[®] is generally used only when the dormancy period has ended. An application should preferably be made when the tubers display "peeping" sprouts but more advanced sprouting can also be treated and controlled (see Sprout Control Programs below). The interval between harvest and the onset of sprouting is dependent on the cultivar and storage temperature.

The method of application is through any thermal aerosol (fogging) equipment. Thermal fogging provides the most efficacious and consistent sprout control.

Excellent movement of the fog through the potato pile is important for consistent efficacy.

Do not apply more than 550 mL per tonne per storage season.

Procedure for Thermal Fogging with SmartBlock[®] :

1. Calculate the quantity of product required based on total tonnage of tubers in storage prior to application.

2. Prepare thermal aerosol/fog generating equipment and insert intake hose into the container

with **SmartBlock**[®].

3. Configure settings such that the air-ducts are set to re-circulate with adequate pressure to move the fog through the potato pile. Turn off all humidifier units. These steps will ensure good distribution of **SmartBlock**[®] inside the storage areas.

4. Place the exhaust end of the aerosol/fog generator in the center of the air mixing chamber or plenum pointed in the direction of the air flow. Potato storage areas vary greatly in design and air movement patterns. It is therefore advisable to work with your local custom applicator to ensure accurate applications.

5. Adjust flow rate of **SmartBlock**[®] through the equipment and match the appropriate aerosol/fogging temperature. Do not allow the

product to dribble out at the injection point.

6. Close off the ventilation system and turn on the fans/re-circulation system.

7. Turn on the thermal fogging equipment and allow the fog into the mixing chamber.

Operate the fans to continuously re-circulate the fog through the pile for a minimum of 24 hours.

- 8. After recirculation is completed, open the ventilation louvers and allow fresh air to move back into the potato storage unit.
- 9. Within 3-5 days following application, tubers should exhibit "burnt out" or darkened sprouts.

<u>Sprout Control Programs with SmartBlock[®]:</u>

General Use Directions

SmartBlock[®] can effectively leverage the natural dormancy of stored potatoes when used according to label directions. Make first application when approximately 75% of tubers show visible signs of sprouting (peeping).

Apply **SmartBlock**[®] at the rate of 137.5 mL per tonne. One litre of **SmartBlock**[®] will treat approximately 7.25 tonnes potatoes. Reapply **SmartBlock**[®] as necessary when

tubers show visible signs of re-sprouting. Potatoes can be removed from storage area and shipped 24 hours after ventilation is resumed.

(a) <u>Combinations of SmartBlock® with other Sprout Control Products:</u> **SmartBlock**[®] can be used as part of a program in which other registered sprout control products are applied sequentially with **SmartBlock**[®], however, **SmartBlock**[®] is effective only after sprouting has commenced. Follow all product use directions and product precautions.

SmartBlock[®] Sprout Control Programs with Chlorpropham (CIPC) or Ethylene Gas: During the storage cycle, when sprouting is observed on tubers where CIPC or Ethylene gas treatments were made earlier, these can be treated with **SmartBlock**[®] to burn off the sprouts. The best timing of application is when approximately 75% of the tubers show visible signs of sprouting ("peeping"). Alternatively, CIPC and **SmartBlock**[®] can also be applied sequentially on the same day, when visible sprouting is observed. Either product may be applied first, immediately followed by the other product or co-injected into the thermal fogging equipment. Follow all use directions and product precautions.

(b) Sprout Control in Potato Tubers undergoing Reconditioning:

When stored at low temperatures, the amount of reducing sugars increases in tubers and affects the fry quality of potatoes. Such tubers can be reconditioned by raising the storage temperature to lower the amount of reducing sugar. Such conditions, however, favor sprouting. **SmartBlock**[®] can be used effectively to burn off sprouts during the reconditioning phase, or even just prior to packaging or shipment. For best results, do not allow potato sprouts to exceed 2.5 cm at the time of treatment.

(c) <u>Rescue of Storage Potatoes with Excessive Sprouting:</u> In cases where storage conditions lead to undesirable sprouting, especially during late in the storage cycle, **SmartBlock**[®] can be effectively used to burn sprouts which are up to 2.5cm. Apply **SmartBlock**[®] at the rate of 137.5 mL per tonne.

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.

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