

Buran

Biological Fungicide and Bactericide for control of powdery mildew in apple, crab apple, pear and quinces; control of scab in apple, crab apple, and pear; control of fire blight and suppression of blossom blight in apple, crab apple, pear, quinces, raspberries, blackberries and Saskatoon berries; and suppression of powdery mildew in grapevine, squash and cucumber (crop subgroup 9B)

COMMERCIAL

SOLUTION

ACTIVE INGREDIENT: Garlic powder.....15%

REGISTRATION NO. 30601.....PEST CONTROL PRODUCTS ACT

READ THE LABEL BEFORE USING

**DANGER POISON
EYE AND SKIN IRRITANT
POTENTIAL SENSITIZER**

Net Contents:

**Manufactured by:
AEF Global inc.
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Lévis, QC, Canada G6W 5M6 (418) 838-4441
Toll free help-line: 1-866-622-3222
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DIRECTIONS FOR USE:

Buran is a liquid formulation containing garlic powder as the active ingredient. Buran is a biological fungicide and bactericide for control of powdery mildew in apple, crab apple, pear and quinces; control of scab in apple, crab apple, and pear; control of fire blight and suppression of blossom blight in apple, crab apple, pear, quinces, raspberries, blackberries and Saskatoon berries; and suppression of powdery mildew in grapevine, squash and cucumber (crop subgroup 9B). Control of powdery mildew in apple, crab apple, pear and quince can be achieved under low to moderate disease pressure. Repeat applications and thorough coverage of target foliage are required to maintain disease protection. Refer to the "Crop-specific directions for use" table for additional information.

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

Field sprayer application: DO NOT apply when wind speed is less than 1 km/h. Avoid application of this product when winds are gusty. DO NOT apply with sprays finer than the American Society of Agricultural and Biological Engineers (ASABE) S572 (572.1 to 572.3) Fine classification. Boom height must be 60 cm or less above the crop or ground.

Air blast application: DO NOT apply when wind speed is less than 1 km/h. Avoid application of this product when winds are gusty. DO NOT apply with spray above plants to be treated. Turn off outward pointing nozzles at row ends and outer rows. DO NOT apply when wind speed is greater than 16 km/h at the application site as measured outside of the treatment area on the upwind side.

For early morning application, foliage should not be wet with dew to the point of runoff.

DO NOT apply by air.

The pre-harvest interval (PHI) is 0 (zero) day.

MIXING PROCEDURES

Foliar application: Dilute **Buran** with clean water. Add the recommended amount of **Buran** to the required amount of water in the spray tank. Agitate as necessary to maintain suspension.

Buran may be tank mixed with a fertilizer, a supplement, or with registered pest control products, whose labels also allow tank mixing, provided the entirety of both labels, including Directions For Use, Precautions, Restrictions, Environmental Precautions, and Spray Buffer Zones are followed for each product. In cases where these requirements differ between the tank mix partner labels, the most restrictive label must be followed. DO NOT tank mix products containing the same active ingredient unless specifically listed on this label.

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact AEF Global Inc. technical services at servtechserv@aefglobal.com for information before applying any tank mix that is not specifically recommended on this label.

DO NOT mix or apply Buran with *Aureobasidium pullulans*, Streptomycin or Kasugamycin, and sulfate based micronutrients. AEF Global recommends conducting a jar test with any product mixes before any tank mix.

Crop-specific directions for use:

GRAPEVINE		
Disease	Level of protection	Instructions
Powdery mildew (<i>Erysiphe necator</i>)	Suppression	Apply at a rate of 18 L/ha in a spray volume sufficient to ensure thorough coverage of target foliage. Subsequent applications may be made every 7-14 days if conditions remain conducive to disease development.

ORCHARDS			
Crop	Disease	Level of protection	Instructions
Apple trees/ Crab apple	Apple scab (<i>Venturia inaequalis</i>)	Control	Apply at a rate of 1.4% in a minimal spray volume to obtain complete coverage (e.g. 7 L in 500 L of water). The maximum rate of product in a single application is 21 L/ha. The addition of a registered non-ionic surfactant such as Agral 90 or Ag-Surf at a rate of 0.1% could help to improve the coverage. This product does not have protectant activity. It should be used as a post-infection treatment, applied after rainfall or when conditions are conducive to disease development. The treatment should be conducted before 450 degree hours (base 0°C) after the beginning of the wetting event.

	Powdery mildew (<i>Podosphaera leucotricha</i>)	Control	<p>Disease control can be achieved under low to moderate disease pressure.</p> <p>Begin applications when conditions are conducive to disease development. Subsequent applications may be made every 7-10 days if conditions remain conducive to disease development.</p> <p>Apply at a rate of 9 L in 500 to 800 L of water per hectare with the addition of a registered non-ionic surfactant such as Agral 90 or Ag-Surf at a rate of 0.1% to improve the spreading.</p>
	<p>Fire blight (<i>Erwinia amylovora</i>):</p> <p>Blossom Blight</p>	<p>Control</p> <p>Suppression</p>	<p>Apply before wetting events when conditions are conducive to infection; reapply as needed.</p> <p>Apply at a rate of 1.4% in a minimal spray volume to obtain complete coverage (e.g. 7 L in 500 L of water). The maximum rate of product in a single application is 14 L/ha.; the addition of a registered non-ionic surfactant such as Agral 90 or Ag-Surf at a rate of 0.1% could help to improve the coverage.</p>

Pear trees	Pear scab (<i>Venturia pirina</i>)	Control	<p>Apply at a concentration of 1.4% in a minimal spray volume to obtain complete coverage (e.g. 7 L in 500 L of water). The maximum rate of product in a single application is 21 L/ha. The addition of a registered non-ionic surfactant such as Agral 90 or Ag-Surf at a rate of 0.1% could help to improve the coverage.</p> <p>This product does not have protectant activity. It should be used as a post-infection treatment, applied after rainfall or when conditions are conducive to disease development. The treatment should be conducted before 450 degree hours (base 0°C) after the beginning of the wetting event.</p>
Pears, Quinces	Powdery mildew (<i>Podosphaera leucotricha</i>)	Control	<p>Disease control can be achieved under low to moderate disease pressure.</p> <p>Begin applications when conditions are conducive to disease development. Subsequent applications may be made every 7-10 days if conditions remain conducive to disease development.</p> <p>Apply at a rate of 9 L in 500 to 800 L of water per hectare with the addition of a registered non-ionic surfactant such as Agral 90 or Ag-Surf at a rate of 0.1%.</p>

Pears, Quince	Fireblight (<i>Erwinia amylovora</i>):	Control	Apply before wetting events when conditions are conducive to infection; reapply as needed.
	Blossom blight	Suppression	Apply at a rate of 1.4% in a minimal spray volume to obtain complete coverage (e.g. 7 L in 500 L of water). The maximum rate of product in a single application is 14 L/ha.; the addition of a registered non-ionic surfactant such as Agral 90 or Ag-Surf at a rate of 0.1% could help to improve the coverage.

RASPBERRIES AND BLACKBERRIES AND SASKATOON BERRIES			
Crop	Disease	Level of protection	Instructions
Raspberries, blackberries, Saskatoon berries	Fire blight (<i>Erwinia amylovora</i>):	Control	Apply before wetting events when conditions are conducive to infection; reapply as needed.
	Blossom blight	Suppression	Apply at a rate of 1.4% in a minimal spray volume to obtain complete coverage (e.g. 7 L in 500 L of water). The maximum rate of product in a single application is 14 L/ha; the addition of a registered non-ionic surfactant such as Agral 90 or Ag-Surf at a rate of 0.1% could help to improve the coverage.

CROP SUBGROUP 9B: SQUASH/CUCUMBER, INCLUDING PUMPKINS, WINTER AND SUMMER SQUASH		
Disease	Level of protection	Instructions
Powdery mildew (<i>Sphaerotheca fuliginea</i> syn. <i>Podosphaera xanthii</i> , <i>Erysiphe cichoracearum</i>)	Suppression	Use at the rate of 1.8%. DO NOT exceed 18 L/ha. Ensure thorough coverage. Repeat applications at 7-10 day intervals to maintain disease reduction. Subsequent applications may be made every 7-10 days if conditions

		remain conducive to disease development.
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PRECAUTIONS: KEEP OUT OF REACH OF CHILDREN

Fatal if inhaled. DO NOT breathe sprays. DO NOT get in eyes or on skin. May cause skin sensitization.

Follow the personal protective equipment for the appropriate mixer/loader and applicator scenario as described below. These restrictions are required to minimize exposure to the worker.

Application equipment and engineering controls	Personal protective equipment	
	Mixer/Loader/Cleanup and Repair	Applicator
Airblast – Open-Cab (except handheld airblast) and Overhead sprayers – Open-Cab	Coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and chemical-resistant footwear, protective eyewear (goggles or face shield) and a respirator with a NIOSH-approved organic-vapour-removing cartridge (with a prefilter) approved for pesticides OR a NIOSH-approved canister approved for pesticides.	Chemical-resistant coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks, chemical-resistant footwear and headgear ² , protective eyewear (goggles or face shield) and a respirator with a NIOSH-approved organic-vapour-removing cartridge (with a prefilter) approved for pesticides OR a NIOSH-approved canister approved for pesticides.
Airblast – Closed-Cab ¹	Same as above	Long-sleeved shirt, long pants, socks and shoes
Groundboom – Open-Cab	Same as above	Coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and chemical-resistant footwear, protective eyewear (goggles or face shield) and a respirator with a NIOSH-approved organic-

		vapour-removing cartridge (with a prefilter) approved for pesticides OR a NIOSH-approved canister approved for pesticides.
Groundboom – Closed-Cab ¹	Same as above	Long-sleeved shirt, long pants, socks and shoes
Handheld equipment (including high-pressure hand wand but excluding handheld airblast) For overhead applications, see below.	Same as above	Coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and chemical-resistant footwear, protective eyewear (goggles or face shield) and a respirator with a NIOSH-approved organic-vapour-removing cartridge (with a prefilter) approved for pesticides OR a NIOSH-approved canister approved for pesticides.
Handheld equipment- Overhead and above the waist (including high-pressure hand wand but excluding handheld airblast)	Same as above	Coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and chemical-resistant footwear, chemical-resistant headgear ² , protective eyewear (goggles or face shield), and a respirator with a NIOSH-approved organic-vapour-removing cartridge (with a prefilter) approved for pesticides OR a NIOSH-approved canister approved for pesticides.
Handheld airblast/mistblower equipment	Same as above	Chemical-resistant coveralls with a chemical-resistant hood over long-sleeved shirt, long pants,

		chemical-resistant gloves, socks, chemical-resistant footwear, protective eyewear (goggles or face shield), and a respirator with a NIOSH-approved organic-vapour-removing cartridge (with a prefilter) approved for pesticides OR a NIOSH-approved canister approved for pesticides
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¹ A closed-cab provides both a physical barrier and respiratory protection (such as dust/mist filtering and/or vapour/gas purification system). The closed-cab must have a chemical-resistant barrier that totally surrounds the occupant and prevents contact with pesticides outside the cab. Chemical resistant gloves are not required in a closed-cab.

² Chemical-resistant headgear includes chemical-resistant Sou'Wester hat, chemical-resistant rain hat or large-brimmed waterproof hat and hood with sufficient neck protection

DO NOT eat, drink or smoke/vape while using this product. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum/tobacco, smoking/vaping, using the toilet or handling mobile devices. Vehicle cabs MUST be decontaminated regularly.

If the product comes in contact with clothing/PPE, remove all contaminated clothing/PPE, wash the outside of gloves with soap and water before removing, wash contaminated skin with soap and water, and then dress in clean clothing. Launder contaminated clothing/PPE regularly and separately from other laundry. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Heavily contaminated or drenched clothing and other absorbent materials contaminated with this product should be discarded. DO NOT reuse them.

Apply only when the potential for drift beyond the area to be treated is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment, and sprayer settings.

Individuals who are sensitive or allergic to garlic should avoid handling the product. Individuals who are sensitive or allergic to garlic should avoid treated areas until dry or after a heavy rain.

DO NOT re-enter or allow entry into treated areas until the spray is dried.

The handling and loading of **Buran**, as well as the clean-up and maintenance activities should be performed in a well ventilated area.

Keep unprotected persons out of the treated areas for the duration of the treatment period.

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 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:

Store containers tightly closed, out of direct sunlight, at temperatures between 4 °C and 20 °C. Cooler storage temperatures are preferred. Store this product away from food and feed.

DISPOSAL

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Follow provincial or territorial instruction for any required additional cleaning of the container prior to its disposal.
3. Make the empty container unsuitable for further use.
4. Dispose of the container in accordance with provincial or territorial requirements.
5. For information on disposal of unused, unwanted product, contact the registrant or the provincial or territorial regulatory agency. Contact the registrant and the provincial or territorial 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.