

2020-1067  
2020-06-09

Last Approved 2020-0959, 2020-05-01

# Cyclone

Lacto-fermented liquid fungicide and bactericide

For suppression of powdery mildew  
on greenhouse cucumbers, field cucurbits – Crop Group 9B (including  
cucumbers, squashes and pumpkins, greenhouse and field mint, on hemp, on  
cannabis (marihuana) produced commercially indoors and field-grown, and  
on greenhouse ornamentals including cut flowers; downy mildew on  
greenhouse cucumbers bacterial canker on field and greenhouse tomatoes;  
and  
powdery mildew and black spot on greenhouse roses

COMMERCIAL

KEEP OUT OF REACH OF CHILDREN

READ THE LABEL BEFORE USING

## ACTIVE INGREDIENT:

Citric Acid..... 10.73 g/L  
Lactic Acid..... 21.37 g/L  
(present as fermentation products of *Lactobacillus casei strain LPT-111*)

WARNING: CONTAINS THE ALLERGEN MILK (whey protein)

**REGISTRATION NUMBER: 30459**  
**PEST CONTROL PRODUCTS ACT**

CAUTION – SKIN IRRITANT  
DANGER – EYE IRRITANT

NET CONTENTS : 500 ml to 1000L

Registered by:  
AEF Global Inc.  
925 des Calfats  
Lévis, QC  
G6Y 9E8  
(418) 838-4441  
Toll free help-line: 1-866-622-3222  
[www.aefglobal.com](http://www.aefglobal.com)

Batch # : 00-000-00

Expiration date : 00/00/00

**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.

**DIRECTIONS FOR USE**

Shake well before use. Foliar treatment for crops listed below.

<b>Crop</b>	<b>Disease</b>	<b>Rate/Concentration</b>	<b>Foliar spray volume</b>	<b>Interval of application</b>
Field and Greenhouse Tomatoes	Bacterial canker ( <i>Clavibacter michiganensis</i> )	12 L/ha (field) or 2.4% (greenhouse)	500 L/ha (field) or apply until runoff (greenhouse)	5 – 10 days
Greenhouse Cucumbers	Powdery mildew ( <i>Podosphaera xanthii</i> ; <i>Erysiphe cichoracearum</i> , syn. <i>Golovinomyces cichoracearum</i> )	1.2% dilution in water solution	Apply in sufficient spray volume to ensure thorough coverage.	7 – 10 days
	Downy mildew ( <i>Pseudoperonospora cubensis</i> )	8% dilution in water solution	Apply until runoff	7 – 10 days
Field Cucurbits: Crop Group 9B (including squashes, pumpkins and cucumbers)	Powdery mildew ( <i>Podosphaera xanthii</i> )	12 - 16 L/ha	500-700 L/ha	7 – 10 days
Greenhouse and Fields Mint	Powdery mildew ( <i>Erysiphe cichoracearum</i> )	1.2 – 2.0% dilution in water solution	500-800 L/ha	7 – 10 days
Greenhouse Roses	Black spot ( <i>Diplocarpon rosae</i> )	1.5 – 2.5% dilution in water solution	800 L/ha	5 – 10 days
Greenhouse Roses Greenhouse ornamentals including cut flowers	Powdery mildew ( <i>Sphaerotheca pannosa</i> )	1.5 – 2.5% dilution in water solution	800 L/ha	7 – 10 days
	Powdery Mildew ( <i>Podosphaera fusca</i> syn. <i>Podosphaera xanthii</i> ; <i>Golovinomyces cichoracearum</i> syn. <i>Erysiphe cichoracearum</i> )	2% dilution (20 L/1000 L water)	1000 L/ha	7 days
Cannabis (marihuana) produced commercially indoors) and field-grown	Powdery mildew ( <i>Sphaerotheca macularis</i> )	1.2% dilution (12 L/1000 L water)	Apply in sufficient spray volume to ensure thorough coverage	7 -10 days
Hemp	Powdery mildew ( <i>Sphaerotheca macularis</i> )	1.2% dilution (12 L/1000 L water)	1000 L/ha	7-10 days

The product can leave white hydrosoluble residues on treated crop. The addition of Xiameter at 0.015% can reduce the apparition of the residues on fruit.

Use of surfactant Liberate at 0.25% (v/v) can help achieve better coverage of leaves and better efficacy. Other suggested surfactants: Agral 90 at 0.1% (v/v). Under conditions of moderate to high disease pressure, use the higher rate and shorter application intervals. For maximum effectiveness, apply Cyclone prior to, or at the early stages of disease development. Apply in sufficient volume to ensure full coverage for effective control. Use nozzles that will provide excellent coverage of the plant foliage (ex: ConeJet). The spray quality should be very fine. Both sides of leaves should be covered with the product.

Begin applications when conditions are conducive to disease development.

Do not re-enter or allow entry into treated areas until the spray is dried, up to 4 hours.

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

Avoid application to reactive metals such as aluminum, tin, iron, or items such as fencing or lawn furniture in order to prevent staining, mottling, or otherwise interfering with finished metal surfaces.

Note: Follow instructions for mixing and applying this product carefully as this product may cause injury to crops and other plants.

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 cleaning of equipment or disposal of wastes.

DO NOT apply using aerial application equipment.

DO NOT allow effluent or runoff from greenhouses containing this product to enter lakes, streams, ponds or other waters.

## **PRECAUTIONS**

**KEEP OUT OF REACH OF CHILDREN.** Prolonged skin contact may cause irritation. Direct eye contact may cause irritation. Avoid contact with skin, eyes or clothing. Avoid breathing mist. Wear long-sleeved shirts, long pants, water proof gloves, and eye goggles and shoes plus socks when handling, mixing,/loading or applying, and during all clean-up/repair activities. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

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

#### 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 centre 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 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 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.

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

#### TOXICOLOGICAL INFORMATION

Treat symptomatically

#### ENVIRONMENTAL PRECAUTIONS

This product may cause injury to other plants if not mixed and applied properly. Follow instructions for mixing and applying carefully.

To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay.

Avoid application when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

#### STORAGE

Keep in a cool place, away from direct sun rays. After extended storage, shake or stir the product thoroughly to assure a uniform suspension. Keep from freezing. Store in original container out of reach of children.

#### DISPOSAL

DO NOT reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to

the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.

2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

**PRODUCT USE INFORMATION**

1-866-622-3222

**WEB SITE**

[www.aefglobal.com](http://www.aefglobal.com)