



# Application Information

## PERpose Plus™

### Broad Spectrum Algacide and Fungicide

PERpose Plus is a hydrogen peroxide-based product specially formulated to prevent and control plant diseases and algae on equipment and hard surfaces, in all stages of crop production, and for post-harvest and storage applications.

PERpose Plus is formulated as a safer, biodegradable, and sustainable product that is not harmful to the environment, plants, animals or people. It has been engineered to include a patented, proprietary blend of stabilizers and buffers to counteract phytotoxicity and extend shelf life. In addition to a non-phytotoxic formulation, PERpose Plus intentionally does not contain peracetic acid which can cause injury to plant tissue and flower bracts with continued use.

### As part of your disease control program

PERpose Plus has a primary mode of action which is oxidation of the outer cell membrane of vegetative endospores, spore cells, fungi and algae. This powerful oxidization means it can control and prevent the following undesirable organisms:

- Algae
- *Aphanomyces*
- Anthracnose
- *Alternaria*
- Black spot
- *Botrytis* (grey mold)
- *Erwinia*
- *Fusarium* (root rot)
- Leaf Spot
- *Phytophthora* (blights, rots)
- *Plasmopara*
- *Pythium*
- Powdery Mildew
- *Pseudomonas*
- *Rhizoctonia*
- Rust
- Scab
- Sclerotinia
- Smut
- *Thielaviopsis*
- Wilts & Blights
- *Xanthomonas*

### PERpose Plus Dilution Chart

Direct Injection	Amount to Add	PPM Active Ingredient
1:50	2.5 fl oz /gal	6,600
1:100	1.25 fl oz /gal	3,300
1:200	0.64 fl oz /gal	1,650
1:300	0.425 fl oz /gal	1,096
1:500	0.25 fl oz /gal	660
1:1,000	128 fl oz /1,000 gal	330
1:2,000	64 fl oz /1,000 gal	165
1:2,500	51 fl oz /1,000 gal	132
1:3,000	43 fl oz /1,000 gal	111
1:4,000	32 fl oz /1,000 gal	83
1:5,000	26.6 fl oz/1,000 gal	69
1:10,000	12.8 fl oz /1,000 gal	33



## PERpose Plus Use Sites and Application Information

Application	Use Rate	Frequency	Directions	Dilution-Direct Injection
General Sanitation-Surfaces	2.0 fl oz/gal	Between crops, before filling house, as needed	Clean debris, weeds, media on benches before application. Keep surface wet for 10 minutes.	1:50
Flats, Trays, Cutting Tools	1.0 fl oz/gal	As needed	Spray until runoff. Additional surfactant may be used.	1:100
Irrigation Lines- Algae and Biofilm Removal	10 gal/1000 gal	In between crops, as needed	Allow solution to sit overnight and flush.	1:100
Irrigation Water-Surface Water	3 gal/1000 gal	Continuous	For contaminated water sources.	1:300
Propagation- Mist	1 gal/1000 gal	Apply for first 4-10 days	Application for first week in propagation.	1:1000
	26 fl oz/ 1000 gal	Apply with mist	Reduce rate for remainder of propagation.	1:5000
Foliar Spray	1/3 fl oz/ gal	Preventative weekly spray	Spray to wet.	1:300
	1.0 fl oz/ gal	Curative- apply 1-3 consecutive days	Spray to wet in early morning or evening (avoid heat).	1:100
Cuttings Dip	1/3 fl oz/ gal	Before sticking	Control of damping off/ root diseases Immerse plants or cuttings, remove and allow to drain. Do not rinse.	1:300
Drench	1.0 fl oz/ gal	Apply at first signs of symptoms. Treat 3 consecutive days.	Apply to saturation direct to soil. Apply at seeding or transplant and follow periodically.	1:100

Refer to product labels for complete application details. Additional technical information is available on our website ([bioworksinc.com](http://bioworksinc.com)) or from your BioWorks solutions advisor. PERpose Plus™ is a trademark of BioWorks, Inc. Always read and follow label directions.