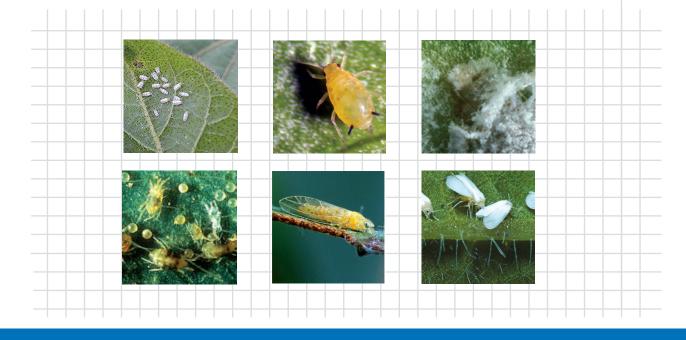




EZ WET SA

Selective - Cuticle Disrupting Pesticide

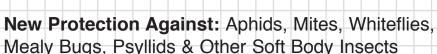
New Protection Against: Aphids, Mites, Whiteflies, Mealy Bugs, Psyllids & Other Soft Body Insects



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EZ WET SA

Selective - Cuticle Disrupting Pesticide















Introduction

EZ Wet SA is a cuticle disrupting insecticide which contains a sugar detergent (soap) as the active ingredient. The sugar soap is a new generation biopesticide that belongs to the soaps or salts of fatty acids class of chemistry and possesses unique cuticle disrupting properties, which result in excellent control of many sucking and soft bodied pests. EZ Wet SA is used at very low rates 1/2 to 2% by volume and works through contact activity. Unlike insecticidal soaps, EZ Wet SA is not effected by hard water, metal ions or variations in water pH.

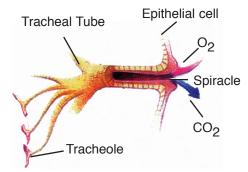
EZ Wet SA is rapidly absorbed by the plant and insect and can be applied with a variety of foliar application methods. Good contact and coverage of the insect pest is needed for effective control. EZ Wet SA can be applied in a manner that has little impact on beneficial insect species, while providing effective pest control. With the broad spectrum of pests controlled, flexible application method, and excellent



plant tolerance, EZ Wet SA can be a valuable tool in integrated pest management program (IPM).

Mode of Action

EZ Wet SA has contact insecticidal activity on all stages of soft bodied insect pests, including eggs. Insect pests that are contacted



demonstrate altered behavior within minutes and rapidly die. The active ingredient, sugar soap, works like a detergent to dissolve the wax and lipid layer components in the cuticle, spiracles and tracheae. EZ Wet SA interacts with the lipid bipolar protein matrix of the cell membrane disrupting their semi permability, insect respiration and moisture regulation is interrupted causing immediate mortality. EZ Wet SA can also provide fungicidal activity as a cuticle disruptor by killing the mycelium of fungi which have the same dissolvable wax layer as insects and higher plants.

Speed of Uptake

EZ Wet SA exhibits superior and immediate wetting properties and cuticle penetration, EZ Wet SA is amphoteric and has excellent surface tension reduction properties, all favoring rapid and efficient uptake of tank mixed products. Compared with water which has a surface tension of 72 dynes/cm, EZ Wet SA

with 27 dynes/cm provides 1/3 the surface tension of water, resulting in rapid penetration of the insects cuticle, spiracles and tracheae for rapid control.



Environmental Fate and Safety

Fatty acid and sugars are rapidly biodegradable. EZ Wet SA exceeds the 70% dissolved oxygen content removal requirement for classification as readily biodegradable. Additionally EZ Wet SA is biodegradable under both aerobic and anaerobic condition. EZ Wet SA is not acutely toxic and LD $_{50}$ in rats is 2.03 g/Kg (Table Salt LD $_{50}$ 3.75 \pm g/Kg), and has minimum "caution" label/worker safety guidelines.

EZ Wet SA has a favorable ecological toxicology profile, being practically non-toxic to birds when ingested, non-toxic to fish, daphnia and mollusk, and earthworms are insensitive. Honey bees exposed while foraging are not sensitive. The impact on beneficial and predators and other natural enemies of the target pest is minimal. This is primarily due to the short leaf surface residual activity, and the fact that the relatively large beneficial insects are not effected. EZ

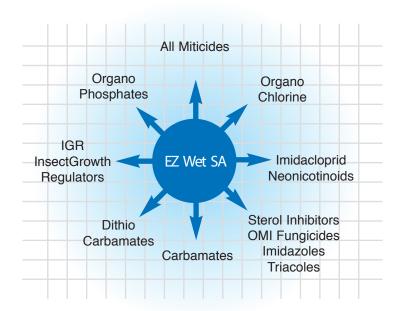


Wet SA has no residual activity once dried and will not kill most beneficial insects. Additionally, because EZ Wet SA is applied at low application rates 1/2 to 2% by

volume, environmental exposure is minimized.

Resistance Management

Laboratory and field studies demonstrate that EZ Wet SA provides excellent control of insects resistant to many classes of insecticide chemistry. Cross resistance has been detected in many pests and resistance management strategies should include rotation or TANK MIXES different classes of chemistry like EZ Wet SA. The addition of EZ Wet SA increases the effectiveness of TANK MIXED pesticides by enhancing the systemic uptake into the pest and plant. EZ Wet SA provides an alternative mode of action for resistance management programs. The use of EZ Wet SA along with other resistance management strategies will aid in preserving the longevity of pest control.



Application Flexibility

EZ Wet SA offers flexibility with various application equipment: foliar application should be applied with equipment calibrated to deliver good atomization for uniform coverage of the foliage and penetration of the canopy. Complete coverage is needed for effective control of the pest. Spray droplets should be in the 1 to 50 micron range with 10 micron the preferred average, with spray volumes of 50 to 200 gallons per acre (454 to 1,817 Liters/HA).



Recommendations for Foliar Application

Pests

Mites, Aphids (including wolley aphids), Whitefly, Mealybugs, Soft Scale, Psyllids, Sawfly Larvae, Lacebugs, Ants, Leaf Hoppers, Tent Caterpillars, Spider Mites

Dose

For pesticide/fungicide mixture applied by ground sprayer. Prepare EZ Wet SA spray mixture to contain 0.25% up to 2.0% vol/vol. EZ Wet SA. One quart up to 8 quarts EZ Wet SA in 100 gallons of spray water.

Comments

Timing: Make first application when target pest are first noticed Reapply when pests reappear. For concentrated spray volumes – Dilute for effective total coverage

Features, Advantages And Benefits

EZ WET SA provides:

- · Effective control of soft bodied insects.
- Enhanced Activity of synthetic pesticides in TANK MIXES.
- · Control of insecticide resistant pests.
- · A soft product on beneficial insects.
- Cost effective pest control for improved grower profits.

