

**GUARD™**  
**A BUFFERING AND WETTING AGENT FOR**  
**ADJUSTMENT OF pH IN ALKALINE WATER**

**LOWERS CHANCE OF ALKALINE HYDROLYSIS**

Some pesticides (especially insecticides and fungicides) lose their effectiveness when used in alkaline solutions. This occurs because of a reaction called Alkaline Hydrolysis. This process inactivates the pesticide by destroying the chemical bonds of the pesticide. The chemical structure and/or acidity of the solution can affect the rate at which this happens. **GUARD™** lowers the pH of the solution to prevent this process from occurring, increasing pesticide performance by lengthening the life of the pesticide in the spray droplet allowing longer effectiveness. **GUARD™** also contains a proprietary surfactant that allows more thorough coverage of the solution. **GUARD™** is also formulated to resist (buffer) the solution once the desired pH is obtained. "Hard" water may require higher rates for pH reduction.

**DIRECTIONS FOR USE**

1. Check pH of spray solution by a reliable method.
2. A range of 4.5-6.0 is best. Check with manufacturer and/or university research for correct pH level.
3. This chart gives approximate amounts of **GUARD™** for pH adjustment/100 gl. of water. Adjust in equal ratios; i.e. 200 gl. equals 2 x **GUARD™**.

<u>Spray Solution pH</u>	<u>Amount of GUARD™ per</u> <u>100 gl Water to Achieve pH of 4.5</u>
pH above 8	8 fl. oz.
pH 7 to 8	4 fl. oz.
pH 6 to 7	2 fl. Oz.

Directions continued on right panel.

# GUARD™

## pH REDUCTION, BUFFERING, AND NONIONIC SURFACTANT

All ingredients exempt from tolerance requirements under 40 CFR 180.1001 (d)

**CAUTION**

**KEEP OUT OF REACH OF CHILDREN**  
**See other caution statements**

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**DIRECTIONS FOR USE (Continued)**

4. Add the appropriate quantity of **GUARD™** (in oz.) to achieve the desired range before adding pesticide.

Add **GUARD™** to the spray tank using agitation. Water pH will change. Periodic pH testing is critical.

**BE CERTAIN TO USE/MIX THE PESTICIDE ACCORDING TO LABEL DIRECTIONS.**

NOTE: Always check compatibility of **GUARD™** and acidic conditions with pesticide before mixing.

**DISPOSAL**

Dispose of unused material and/or container in accordance with local, state, and federal regulations.

**WARNING**

Prolonged or repeated contact of concentrated product with skin and/or eyes will cause irritation and reddening. Eye damage possible if contact is prolonged. Generated mists may be irritating to eyes, skin, and respiratory tract. Harmful if swallowed. Always wear appropriate personal protective equipment when handling agricultural products.

**FIRST AID**

**Skin & Eyes:** Flush with plenty of water. Consult a physician if irritation develops or persists.

**Ingestion:** Give plenty of water if conscious. Do not induce vomiting. Seek medical attention immediately.

Seller makes no warranty of fitness or merchantability. Buyer agrees that seller's maximum liability shall not exceed the purchase price of this product.

NET CONTENT: 1 Gallon (3.78 liters)