



**JHBiotech**  
Innovation for a Greener Earth

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# MIXWELL™



Compatibility Agent / Acidifier / Activator / Chelator

**MixWell™** is a multipurpose, multifunction spray tank or irrigation water additive designed for use where the pH needs to be lowered into a more acidic range. **MixWell** has several functions: Compatibility Agent, Acidifier, Activator and Chelator. It is an organic based material that is natural and environmentally friendly.

## COMPATIBILITY AGENT

Calcium, iron, zinc, and other nutrients react with phosphorus and other chemicals under alkaline conditions to create deposits called precipitates. These precipitates collect in the bottom of mixing and spray tanks and can eventually clog lines and nozzles. Precipitates also tie up valuable nutrients making them unavailable to plants. **MixWell** lowers the pH of the mixing water and encapsulates or chelates these minerals to prevent precipitates from forming.

## ACIDIFIER

**MixWell** is an acidic material. Adding **MixWell** to the spray tank or irrigation water will lower the pH to a more desirable range. By applying **MixWell** in a routine program, the pH of calcareous alkaline soils can be lowered to a more desirable acidic range to free up nutrients.

## Activator

Many pesticides need to be applied with slightly acidic water. High pH conditions degrade and reduce the effectiveness of many pesticides. A pH of 7.5 or higher is alkaline enough to affect some pesticides. A water pH of between 4 and 6 is generally recommended for pesticide sprays. **MixWell** brings down the pH of spray solutions for optimum pesticide performance and frees up nutrients to increase biological activities in the soil.

**MixWell** can dissolve solid deposits and get them back into solution for easy clean up making **MixWell** an excellent equipment cleaner for routine maintenance of irrigation and spray lines. Simply add **MixWell** and water to the spray tank until the precipitate dissolves and enters the solution.



### Active Ingredients

B-Hydroxycarballylic Acids	40%
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### Inert Ingredients

Water	60%
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<b>Total</b>	<b>100%</b>
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## Chelation and Nutrient Availability

**MixWell** has chelating properties that reduces the chance of unwanted chemical reactions (ex. calcium combining with carbonates). As a chelating agent **MixWell** can form bonds with metal ions making them more available for plant uptake. The solubility of calcium, copper, iron, magnesium, manganese, and zinc salts are all increased.

When applied to sodic soils, **MixWell** increases the availability of both calcium and magnesium to the plant. **MixWell** also aids in the release of sodium from clay particles and helps leach out sodium from the root zone.

**MixWell** is an OMRI listed spray adjuvant exempt from EPA registration under FIFRA 25(b).

**MixWell™** makes an excellent cleaning solution that can remove scale, rust, and hard water buildup in irrigation lines, mixing tanks, spray tanks, nozzles, application equipment and more. **MixWell** has strong antioxidant properties. When applied to fresh cut fruits and vegetables it can extend shelf life and reduce losses from rot and browning.

### Compatibility

**MixWell** is compatible with most pesticide and fertilizer solutions. However, **MixWell** is not compatible with calcium thiosulfate. *Always conduct a jar test with new mixes before combining them in a tank.*

### High pH Soils

The adjustment of high pH soils begins by mixing 1-2 gallons of **MixWell** per acre, followed by further treatments of 1 gallon per acre until the desired pH is reached. When **MixWell** is applied to the soil it helps to improve water absorption and prevent losses due to run off and evaporation; this translates into savings in both water and money. The organic components in **MixWell** help improve soil structure and assist in the release of sodium.



Calcium phosphate precipitate



The addition of MixWell makes a clear solution

### Advantages of MixWell

1. pH reducer solution
2. Corrects hard water, preventing precipitation with Ca, Mg, etc.
3. Helps prevent clogging of equipment
4. Removes scale and hard water deposits
5. Compatibility agent
6. Biological activator
7. Increases the availability of nutrients
8. Prevents hydrolysis of pesticides

Desired pH / Original pH	4.5	5.0	5.5	6.0	6.5	7.0
9.0	180	130	110	80	60	30
8.5	120	115	90	70	50	25
8.0	110	100	80	50	40	15
7.5	100	80	70	40	30	5
7.0	90	60	60	30	20	0

Fluid ounces of MixWell needed in 100 gallons of water\*

\* This table can be used for reference only because the chemical composition of water can vary by location. For more information, call our laboratory at (805) 644-1095.



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