



AgEssentials™ PH

Pesticide efficacy is Essential.

AgEssentials™ PH is the top performing pH-conditioning adjuvant for ALL crops. Color-change technology optimizes spray water and neutralizes hard water - **protecting chemistry for better coverage, consistent control and higher yield potential.**

Better Spray. More Impact. Higher ROI.



AgEssentialsTM PH

- **Built-in pH Indicator:** Turns spray solution pink when the optimum pH range of 4.5-5.5 is reached
- **Water Conditioning & pH Adjustment:** Neutralizes dissolved salts and lowers spray water pH to help prevent alkaline hydrolysis of sensitive pesticides
- **Improved Spray Coverage:** Enhances wetting and spreading to create a more uniform spray film on the leaf surface
- **Enhanced Spray Performance:** Helps maintain proper spray solution conditions to support consistent herbicide, fungicide, and insecticide activity
- **Tank Mix Compatible:** Designed for use with most fertilizers and crop protection products when used according to label directions
- **APE/NPE:** Free of Alkylphenol Ethoxolates

PH INDICATOR, ACIDIFIER, WATER CONDITIONING AGENT & SPREADER

AgEssentialsTMPH is an APE/NPE free, multi-functional spray adjuvant designed to improve pesticide performance by correcting spray water pH, conditioning hard water, and enhancing spray coverage. It contains a built-in pH indicator that turns the spray pink when the optimum pH range of 4.5-5.5 is reached, eliminating the need for separate pH testing equipment. High pH and hard water can reduce the effectiveness of many crop protection products. AgEssentialsTMPH helps maintain proper spray solution conditions while improving wetting, spreading and penetration for more consistent results in the field.

PRINCIPAL FUNCTIONING AGENTS:

A proprietary blend of alcohol ethoxylates and Water conditioning agents	80%
Constituents Ineffective as Spray Adjuvant	20%
Total	100%

APPLICATION AND USE

The correct volume of AgEssentialsTMPH to be added to the spray water is indicated by the color pink at pH between 4.5 to 5.5.

Soft Water: A rapid color change occurs from milky white to pink when optimum pH is reached.

Hard Water: Color changes slowly from milky white to yellow to orange to pink when optimum pH is reached.

pH 8.2

pH 6.8

pH 6.5

pH 6.3

pH 5.3

pH 4.5

The following table serves as a guide to the volume required for different types of spray water.

Water Hardness	Total dissolved salts	Conductivity S/cm	Rate (fl oz) per 100 gal
Soft	0-100	0-200	5-6
Medium	100-200	200-300	6-7
Medium Hard	200-250	300-400	7-10
Hard	250-300	400-500	10-20
Very Hard	300-400	450-500	20-30
Extremely Hard	400+	500+	30+

PRODUCT	pH 9	pH 7	pH 5
Herbicide	10 min	17 hr	16 days
Fungicide	2 min	3 hr	10 hr
Insecticide	24 hr	10 day	Stable