

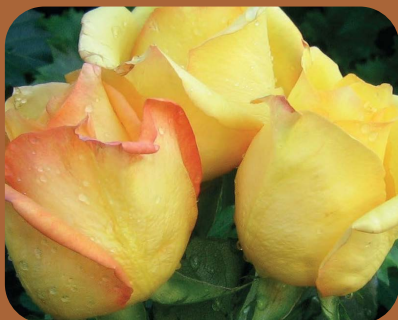
Buffer 5™

ACIDIFYING SPRAY ADJUVANT WITH PH INDICATOR
Wetter / spreader, humectant & sequestering agent

PRODUCT CHARACTERISTICS:

Specific Gravity: 1.13
Colour: Clear deep pink liquid

ANALYSIS	
577 g/l	Buffering & wetting systems
114 g/l	Noneylfenol ethoxylate



BENEFITS OF BUFFER 5

ACIDIFYING : BUFFER 5™ has a pH indicator which assists the grower to achieve the desired pH for the nutrient or pesticide that is being added.

BUFFER 5™ neutralises the excess hydroxyl (OH-) and dissolved salts in water. The net effect is the reduction of pH, creating optimal conditions for the spray chemical.

BUFFERING : BUFFER 5™ will neutralize the dissolved salts that inhibit the water's ability to change the pH. This effect softens the water and helps overcome some phytotoxicity problems.

BUFFER 5™ color change:
(Yellow to Pink)



WETTING / SPREADING / PENETRATING: BUFFER 5™ acts as a wetting agent and reduces surface tension. It also acts as a penetrant by disturbing the leaf's waxy layer and driving chemicals through this natural layer. The result is a faster and more efficient uptake and response from spray chemicals.

WHAT IS ALKALINE HYDROLYSIS?

When the pH of water exceeds 7 the concentration of hydroxylions (OH-) becomes high enough to break down bonds within the chemical structure. This breakdown inhibits or nullifies the performance of some pesticides. These include herbicides, insecticides, fungicides and growth regulators. Hard water (above 200-250 ppm of dissolved ions) will also be improved by using BUFFER 5™. This has the secondary benefit of softening the water another cause of loss of activity in many chemicals.

pH adjustment with Buffer 5™



Without Buffer 5™

With Buffer 5™

pH adjustment - the pink color indicates succesful pH adjustment with Buffer 5™

Disclaimer: This information and all further technical advice is based on our present knowledge and experience and approvals from the registration authorities. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. In the event of any discrepancies between the information stated herein or any other information source and the information stated on the label of the product, the information stated on the label of the product will prevail. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of the customer. Reference to trade names use by other companies is neither a recommendation, nor does it imply that similar products could not be used.

Buffer 5 is a trademark of Sineria Holland BV.

DIRECTIONS FOR USE

Agitate contents well before dilution

USE	pH RANGE	RATE PER 100 L WATER
Buffer with herbicides and systemic fungicides	4.5 – 5.5	125 – 250 ml
Buffer with Glyphosate	3.5 – 4.5	100 – 150 ml

ADDITIONAL NOTES

Buffer 5™ contains a buffering system that, when applied correctly will buffer the majority of spray solutions between a pH of 4,5 and 5,5 depending on water quality.

- **Buffer 5™** contains a wetting agent which improves the wetting, spreading and contact of the remedy on the sprayed plant surface.
- **Buffer 5™** increases the rate of uptake of systemic remedies and foliar feeds.
- **Buffer 5™** helps prevent the rapid degradation of alkaline-sensitive remedies.
- **Buffer 5™** assists in neutralization of dissolved salts that influence product performance.
- **Buffer 5™** retards evaporation rate and improves re-wetting of the dried spray droplets.

Buffer 5™ EXTENDS THE LIFE OF MANY HERBICIDES AND PESTICIDES BY PREVENTING THE DECOMPOSITION OF CHEMICALS IN ALKALINE (HIGH PH) WATER.

NOT TO BE USED FOR ANY PURPOSE, OR IN MY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION

Note: The above suggested rates of application should be used as a guide only. Application rate may be affected by water quality. It is advisable to routinely check the pH of the spray tank water before and after the incorporation of Buffer 5. It is recommended that when applying to a crop for the first time or in combination with other chemicals, a small test area should be sprayed and observed prior to the crop spray. Where possible, it is recommended that regular leaf (sap) tests be conducted to determine actual plant nutrient availability during each growing cycle. Soil test at least once per year are essential.

Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not warrant that it will be efficacious under all conditions because the action and effect thereof may be affected by factors such as abnormal soil, climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label, as well as by the method, time and accuracy of application. The registration holder furthermore does not accept responsibility for damage to crops, vegetation, the environment or harm to man or animals or for lack of performance of the remedy concerned due to failure of the user to follow the label instruction or to the occurrence of conditions which could not have been foreseen in terms of the registration. Consult the supplier immediately in the event of any uncertainty.