



agrichem



AGRI-BUFFA®

ACTIVE CONSTITUENTS:

430g/L Phosphate Esters of Polyalkalene Oxide
derived of synthetic alcohols

100g/L Polyalkalene Oxide derived of synthetic alcohol



ACIDIFYING BIODEGRADABLE SPRAY ADJUVANT NOW WITH pH INDICATOR FOR PENETRATING AND AIDING COMPATIBILITY

Benefits of AGRI-BUFFA®

ACIDIFYING:

- ✓ Agri-Buffera has a pH indicator (see colour indicator guide overleaf) which assists the grower to achieve the desired pH for the nutrient or pesticide that is being added.
- ✓ Agri-Buffera neutralises the excess hydroxyl ions (OH⁻) and dissolved salts in water. The net effect is the reduction of pH creating optimal conditions for the spray chemical. Agri-Buffera can be applied by ground or aerially

BUFFERING:

- ✓ Agri-Buffera will neutralise the dissolved salts that inhibit the water's ability to change pH. This in effect softens the water and helps overcome some phytotoxicity problems. (See rates guide overleaf).

WETTING / SPREADING / PENETRATING:

- ✓ Agri-Buffera 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.

WATER QUALITY AND ALKALINITY

The quality and physical properties of water have a direct influence on the performance of many pesticides. High levels of dissolved salts can keep alkaline water buffered at a high pH which may adversely affect some chemicals. In some cases a direct reaction occurs causing a complete breakdown known as alkaline hydrolysis.

WHAT IS ALKALINE HYDROLYSIS?

When the pH of water exceeds 7 the concentration of hydroxyl ions (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 Agri-Buffera. This has the secondary benefit of softening the water - another cause of loss of activity in many chemicals. Please refer to Agrichem's ready reckoner "Chemicals: Their effect and Rate of Degradation", which provides details of the rates of hydrolysis and optimum pH levels for a range of commonly used chemicals.

Product Characteristics

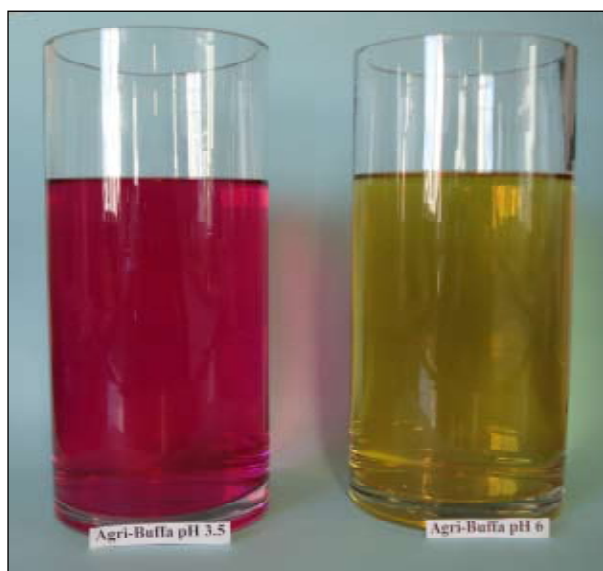
Specific Gravity: 1.13 Colour: Clear deep pink liquid

Analysis	
430g / L	Phosphate esters of polyalkalene oxide derived of synthetic alcohols
100 g /L	Polyalkalene oxide derived of synthetic alcohol

Directions for use

SITUATION	ph RANGE	RATE
Glyphosate / Roundup®	3.5 - 4.5	225 - 350 ml / 100 L water
Surfactant / Penetrant With Herbicides and Systemic Fungicides	4.5 - 5.5	125 - 250 ml / 100 L water

Water Hardness	Rate of Agri-Buffer (ml/100L water)
Soft	35 - 55
Medium	55 - 65
Hard	75 - 180
Very Hard	180 - 250 +

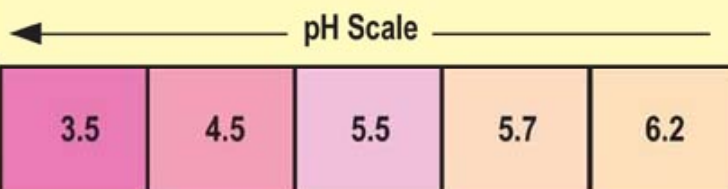


LHS Agri-Buffer in pH3.5 solution
RHS Agri-buffer in pH6 solution

GENERAL INSTRUCTIONS:

AGRI-BUFFER® should be added to the spray tank to ensure that pH is in the optimum range.

Fill tank to 3/4 with water and whilst agitating add sufficient **AGRI-BUFFER**® to reach the required pH according to the colour scale. Once the desired pH has been achieved, add other products and the remaining water.



NOTE: The suggested rates of application are designed for typical Australian conditions and such should be used as a guide only. Each farmer's climatic conditions, water quality, soil types, application processes and practices may differ and therefore necessitate corrections to ensure optimum results. Good agricultural practice requires that application be avoided under extreme weather conditions such as temperatures over 28°C, high humidity, frost, rain etc. It is recommended that when applying to a crop or area for the first time, or in combination with other chemicals, a small test area should be sprayed and observed prior to the total spray. Where possible, it is recommended that regular leaf (sap) tests are conducted to determine actual plant nutrient availability during each growth cycle. Soil tests at least once per year are essential.



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