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ACIDIFICATION AND COMPATIBILITY OF NONTOX-SILICA™

ACIDIFICATION

Some pesticides require the addition of acidifying buffers to improve the half life and effectiveness of the chemical. The pH of the concentrated Nontox Silica™ (NTS) is about 12 and initially it was recommended to apply Nontox Silica™ alone. The latest results indicate that diluted Nontox Silica™ can be acidified to as low as pH 3,02.

<i>pH of the diluted NTS</i>	Expected concentration of Nontox Silica™ mg Si/litre	Actual concentration of Nontox Silica™ mg Si/litre
10,26	82	83
7,00	82	79
5,46	82	81
3,02	82	82

Nontox Silica™ can therefore be acidified once the concentrate is diluted at 200 to 250ml per 100 litre water.

COMPATIBILITY

To evaluate the compatibility of Nontox Silica™ with a nutrient solution mixture were prepared using two of the available complete nutrient mixes and apply Nontox Silica™ at a rate of 20mg Si per litre of nutrient solution. The mixtures were analysed 3 days after mixing.

Element	A without Si	A with Si	B without Si	B with Si
Total N	3,10	3,40	31,40	33,40
NH ₄ -N	2,10	2,40	22,00	24,00
NO ₃ -N	1,00	1,00	9,40	9,40
Urea N	0,09	0,11	0,52	0,53
P	112	107	754	751
K	288	284	2660	2660
Ca	42,90	36,30	35,40	35,60
Mg	12,40	12,10	77,00	78,70
S	12,40	13,40	80,54	83,70
B	1,83	1,86	18,20	18,30
Cu	0,13	0,13	1,13	1,13
Fe	1,30	1,17	13,40	12,00
Mn	0,49	0,48	4,67	4,69
Zn	1,67	1,64	13,60	14,00

The results show that the addition of Nontox Silica™ did not change the concentrations of the 14 nutrient elements in solution.

For technical enquiries contact John Pretorius 083-228 0258 or Hannes Coetzee 082-785 7595.