

WATER SANITATION

ALWAYS REFER TO PRODUCT LABELS

AVAILABLE ACTIVES	CONCENTRATION	PH OF MIXTURE	ORP	EXPOSURE TIME
Calcium hypochlorite (Chlorine; $\text{Ca}(\text{ClO})_2$)	150 – 200 ppm 75 – 100 ppm free chlorine (30 g / 100 l of a 680 g/kg formulation)	6.5 – 7.5	> 800 mV	2 min (minimum)
Chitosan	500 ppm	6.0 – 6.5	N/A	10 – 15 sec
Chlorine dioxide (ClO_2)	Please consult with the supplier, differs for each system	5.0 – 7.5	≥ 670 mV	2 min (minimum)
Clove oil*	2000 ppm (Dose: 2%)	5.5 – 8.0	N/A	1 – 3 min
Ozone (O_3)	Pre-determined by supplier's application	N/A	N/A	15 sec
Peracetic acid (PAA)	140 – 420 ppm (Dose: 0.1 – 0.4%) Depending on the supplier	3.0 – 8.0	N/A	1 – 2 min
Potassium sorbate*	1000 – 7300 ppm (Dose: 1 – 3%)	N/A	N/A	15 min

* Only recommended for use as alternative sanitisers in pre-packhouse drench systems at the recommended drench time of 2 – 3 min. Keep in mind that there is no existing MRL for potassium sorbate if used on citrus destined for the local South African market.

CONCENTRATION MANAGEMENT

1. The use of an automatic dosing system is preferable.
2. Always dissolve granular chemicals in lukewarm water (35 – 40°C) before adding to the flume.
3. Maintain concentration and mixture parameters (e.g. pH) to keep products effective – measure every 1 hour.
4. Replace recirculating mixtures weekly (or when dirty).

WARNINGS AND IMPORTANT INFORMATION

1. Some sanitation (disinfectant) products are incompatible with fungicides or each other. Always check the compatibility before use.
2. Some sanitisers will dissipate after a period of time, so concentration measurement and management is crucial.
3. The efficacy of a system is dependent on each unique packhouse, e.g. roof height, air flow, humidity, length of line, etc.
4. Pre-sort and remove decayed/injured fruit to reduce pressure on the system and prevent the spread of disease.

MRL list and restrictions: Visit www.cga.co.za or email pb@cga.co.za for “RECOMMENDED USAGE RESTRICTIONS FOR PLANT PROTECTION PRODUCTS ON SOUTHERN AFRICAN EXPORT CITRUS”