



Safe Disinfection for
Food Produce



Aquatabs 8.68g
Disinfection for
Animal Drinking Water
& Postharvest Processing



Clean water is essential for healthy animal growth. **Water contamination** leads to **disease** and **reduced productivity**. Animals that consume good quality water are **healthier**, grow **faster** while **reducing antibiotic** intervention. Carcasses undergone surface disinfection not only improves **food safety**, but extends **shelf life** by preventing blown pack spoilage.

What are Aquatabs

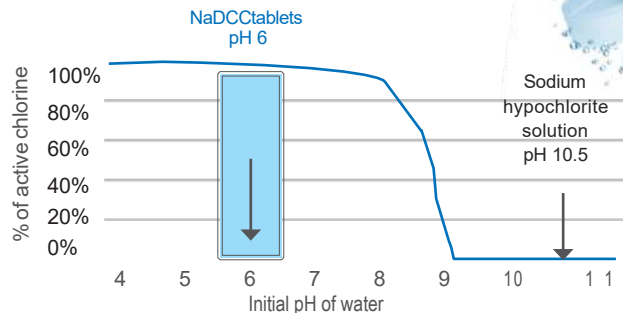
Aquatabs are **NaDCC** effervescent tablets used to disinfect contaminated water by killing microorganisms to prevent cholera, typhoid, dysentery and other water borne disease.

Aquatabs Benefits

Aquatabs are **simple** to prepare, use and are **easy to store** & transport. A single dose tablet that gives **exact dosage**, every time.

Optimized pH

In solution, **NaDCC** generates optimum pH level (~6). The level of active chlorine available at neutral pH is **superior** to that of sodium hypochlorite (alkaline pH)



The slightly acidic solution prevents the formation of biofilm when used continuously at low concentrations.

BIOACTIVITY - BACTERICIDAL, FUNGICIDAL, VIRUCIDAL AND SPORICIDAL

EXAMPLES OF BIOACTIVITY

Bacteria	<i>Salmonella spp, Staphylococcus aureus, Streptococcus spp, Yersinia spp. Pseudomonas aeruginosa</i>
Mycobacteria	<i>Mycobacterium spp, Mycoplasma spp.</i>
Yeast/Moulds	<i>Candida albicans, Aspergillus spp</i>
Viruses	Marek's disease, Avian influenza, Newcastle disease, African swine fever, Parvovirus
Spores	<i>Bacillus stearothermophilus, Bacillus cereus, Clostridium perfringens, Clostridium tetani</i>

Stock Solutions for Dosing Pumps

When making a stock solution for a dosing pump system, always add tablets to the solution container, then add water. Use the following table as a guide for the stock solutions

No. of Tablets 8.68g	Stock Volume Litres	Stock Solution (mg/l available chlorine)	Proportioner Setting	Dosage (mg/l available chlorine)
1	100	50	2.5%	1.25
10	1,000	50	2.5%	1.25
1	50	100	1.0%	1
10	500	100	1.0%	1
1	50	100	0.5%	0.5
5	250	100	0.5%	0.5
1	1	5000	0.1%	5
10	10	5000	0.1%	5
1	0.5	10000	100 ppm	1
60	30	10000	100ppm	1
60	30	10000	50 ppm	0.5

Caution: Wear protective gloves/eye protection and ensure process is completed in a well ventilated area.

Storage: Tub packed Tablets. Shelf life: 3 years. Store in a cool, dry and ventilated place.

What is Aquatabs Food-Safe?

Aquatabs Food-Safe is an effervescent **purification** tablet for cleaning **fresh** or **pre-cut fruits** and **vegetables**, and for post harvest processing.

It **extends shelf-life** of fresh produce and make them **safe** for consumption without further treatment by **eradicating micro-organisms** such as *Listeria monocytogenes*, *Salmonella* Spp. and *Escherichia coli*.

Microorganism	Standard Test /location	% Reduction
AeromonasHydrophila	MOD France	99.999
Campylobacter jejuni	MOD France	99.999
Clostridium perfringens	EN1276:1997 (mod)	99.999
Erwinea carotovora	Volcani Institute	99.999
Escherichia coli	AFNORNT 72.301	99.999
Escherichia coli O157	EN1276:1997 (mod)	99.999
Gardia Cycts	OAC	99.9
Lactobacillus plantarum	AFNORNT 72.301	99.999
Listeria monocytogenes	EN1276: 1997 (mod)	99.999
Pediococcus spp.	EN 1276:1997	99.999
Pseudomonas spp	AFNORNT 72.301	99.999
Poliovirus	EPA water purifier challenge test	99.99
Raoultella terrigena		99.999
Rotavirus		99.99
Saccharomyces cerevisiae	EN 1650:1998	99.999
Salmonella spp.	MOD France	99.999
Staphylococcus aureus	AFNORNT 72.301	99.999
Vibrio cholerae	MOD France	99.999
Yersinia enterocolitica	MOD France	99.999

How to use Aquatabs Food-Safe

For **ready to eat (RTD)** produce consumed within 24 hours

a. Remove as much dirt and debris from the fruit and vegetables as possible (brush or wash)

b. Add **1 tablet to 20 litres** of water. Where possible ensure that the temperature of the rinse water is about 10° C higher than that of the fresh produce.

c. Add the fresh produce to the treated water and rinse with agitation for a minimum of 30 seconds, up to 5 minutes if possible. Ensure that the trapped air in some vegetables e.g. broccoli is removed.

d. Fruit and vegetables should be eaten as soon as possible after rinsing.

e. If storage is required, remove the produce and shake off excess water, spin dry if possible. Place in a sealed polythene bag or air tight container and refrigerate at 4 - 8°C for as short a period as possible up to 24 hours

Value & Benefits

- **Broad range biocide:** inactivate wide range of micro-organism
- **Food Safe:** National Sanitation Foundation (NSF) certified
- **Easy** to use: dissolve in water within minutes
- **Cost effective:** 1 tablet produce 20 Litre of water for purifying & cleaning
- **Solid** form: easy to store, no leakage
- **Accurate** dosing

Efficacy Studies

- **Biocidal activity** certified by 3rd party independent laboratories & universities
- **Shelf-life extension** verified via accelerated shelf-life testing & sensory evaluation
- **Food safety** certified by **National Sanitation Foundation (NSF)**

Active Ingredient: NaDCC

NaDCC is the **next generation** chlorine disinfectant.

- **Stronger:** generate hypochlorous acid (HOCl), a far stronger anti-microbial agent than hypochlorite (ClO⁻). Anti-biofilm. Sporicidal.
- **Safer** for Skin: near-**Neutral** pH (~6)
- **Safer** for Lungs: **Less chlorine** evolved
- Slow release: 50% HOCl held in reserve
- **Cost efficient:** A 1.67g tablet generates 20 litres of treated water
- **Low elimination half-life:** 40 mins
- **Environmental friendly:** Non-bioaccumulating. Degrades under UV.
- **GMP:** ISO 9001, ISO 14001 & ISO 45001

References: AFNOR: Association Francaise de Normalisation,
MOD: Ministry of Defense, AOAC: Association of official Analytical Chemists

