# **Technical** Bulletin

# **Castle Wash**



### **Chlorine Dioxide**

#### **Product Description:**

#### Control fungal and bacterial problems in one application:

Castle Wash is used to reduce spore (reproductive structure of fungi) levels found in water and on the surface of fruit and vegetables. In many instances the water used is untreated water (or bore water), which can have high levels of suspended solids, organic and microbiological contamination. These factors complicate the requirements to produce a product free of spoilage, microorganisms which are suitable for the consumer.

Note: The FSANZ Standard Code: **Standard 1.3.3-12**. Permitted bleaching agents, washing and peeling agents for the use of chlorine dioxide.

- Compatible with a large number of fungicides.
- Less corrosive than chlorine based products
- Unlike Chlorine, organic matter does not inactivate Castle Wash rapidly.
- Rapid kill of Penicillium, sour rot and similar fungus.
- Low usage rates.
- Environmentally accepted product.

#### **Application:**

- 1. Get a container, which you can use for mixing up the chemicals. It should be a sealed container with a vented lid. Mix-up, outside where people are not working. Or you can use an open container and also mix outside where there is plenty of ventilation.
- Locate the volume of your dump tank in the far left column of the table overside.
   Lets look at 500 litres as an example.
- 3. Using the table.
- 4. Measure out the correct volume of Castle Dioxide Base with a measuring cylinder and add it into the mixing container.
- Measure out the correct volume of Castle Dioxide Base Activator with a measuring cylinder and add it into the mixing container.
- 6. Close the lid of the container (if you have a lid) and give the tank a slight rocking motion for about 10 seconds to mix the two chemicals.
- 7. Wait for 5 minutes.



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Castle Post Harvest
Fruit that looks good, sells first

- 8. Tip the complete contents into your dump tank. This will correspond to a dose off 5ppm of chlorine dioxide.
- 9. Wait 2-5 minutes for the chlorine dioxide to mix into the dump tank.
- 10. Measure the concentration of chlorine dioxide in the dump tank with a chlorine test kit which uses DPD No.1 tablets. â€" Multiply the result by 2 to measure chlorine dioxide.
- 11. Make-up more Castle Wash solution and dose as required to maintain 5 ppm level of chlorine dioxide.
- 12. Check ppm and re-dose every hour.
- 13. Check and adjust the pH to 7.5 to 8.

Pack Size: 25 and 205 Litres

#### **Dosing Table:**

Tank Volume Litres	Ppm Level	Castle Dioxide Base Mls	Castle Dioxide Activator Mls
100	5	50	50
200	5	100	100
300	5	150	150
400	5	200	200
500	5	250	250
600	5	300	300
700	5	350	350
800	5	400	400
900	5	450	450
1000	5	500	500
1500	5	750	750
2000	5	1000	1000
2500	5	1200	1200
3000	5	1500	1500

When mixing manually check ppm levels every hour

#### SHELF LIFE:

As a quality assured manufacturer, Castle Chemicals has a stringent Quality assurance programme. As part of this regime, the label on this product shows a batch number and date of manufacture. This product has a shelf life of 24 months from the label printed date of manufacture. This information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Castle Chemicals assumes no responsibility for personal injury or property damage to vendees, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of material.



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