



Iodophor Disinfection of Salmonid Eggs Standard Operating Procedure

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Disinfection of green eggs, according to the literature, can be accomplished in one of two ways: disinfection during water hardening; and surface disinfection after water hardening. Disinfection of wild eggs is vital to control the introduction of disease into the Hagen Aqualab. As a multi-user recirculation facility, transmission of disease is an ongoing concern and as such **disinfection of eggs is mandatory**. Eggs are treated at 100 ppm of active iodine. We use Westcodyne at a strength of 6 mL L⁻¹.

1: Water hardening fertilized eggs

Eggs are placed in static ground water to harden. 1 L eggs in 10 L water for 2 hours at 4°C. **During this time the water may be taken from the recirculation system, but must not to be returned to the system. All waste water associated with water hardening must be disinfected with chlorine for 10 min prior to disposal into the trench drain.**

2: Fertilized eggs disinfected after water hardening

Eggs are placed in a bath of Westcodyne at 100 ppm active Iodine (pH 7) (6 mL L⁻¹) for 10-20 min. Eggs are removed from the solution and rinsed for 10 min then placed in the rack.

3: Eyed eggs

Prior to placing the eggs in the vertical incubator the eggs are placed in a bath of Westcodyne at 100 ppm active Iodine (pH 7) for 10-20 min. Eggs are removed and rinsed in clean water for 10 min and placed in the heath rack. This method is only used when eyed eggs are received in Aqualab.

Procedure:

- 1: Water harden eggs (as per 1: above)
- 2: Make Westcodyne solution (6 ml Westcodyne to 1 L of water). Buffering the solution is not necessary due to the hardness of the water.
- 3: Place eggs in tray 1 egg layer thick.
- 4: Fill tray with 100 ppm Westcodyne to immerse eggs at a ratio of 1:5 (eggs : solution) for 10-20 min.
- 5: Drain Westcodyne solution from the tray onto the floor. Rinse floor.
- 6: Turn water on to rack to commence rinsing for ten minutes. The time starts when water overflows the last tray used.
- 7: After the ten minute rinse, the water from the egg trays may be returned to the system by closing the trench valve and opening the system valve. These valves are to be found in the trench on the drain line for the tray tank associated with the incubator.