

Liquid Formaldehyde Usage

North America

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When considering the use of formaldehyde in your hatchery there are many different aspects that first need to be considered (see chart to right).

First and foremost, make sure you know and understand your state and country rules and regulations for usage of this chemical. **Secondly**, ensure you are following all safety requirements. **Finally**, ensure you adhere to the approved administration methods. The use of this chemical requires formal training of employees, medical qualifications, and industrial hygiene monitoring to ensure safe levels throughout the hatchery. All of these safe guards should be in place before beginning the use of formaldehyde, or when changing the dosage or administration of formaldehyde.

Know and Understand:

- Your state/country rules and regulations for usage
- Safety requirements
- Approved administration methods

When deciding how much formaldehyde should be used in the hatcher cabinet a simple calculation is used to figure the total amount for the entire hatch cycle. Estimate the total number of chicks to be hatched in the hatcher cabinet. Multiply this number by .075 ml and this will give you the total amount of formaldehyde to be used in the entire hatch cycle per cabinet.

Example: 11,000 chicks per hatcher cabinet (X) .075 ml = 825 ml

This total amount of formaldehyde should then be administered evenly and consistently throughout the hatch process. The first dose should be administered immediately following transfer. The next doses should be spread out every 6-8 hours until approximately 4 hours prior to the pipping process. 4 hours prior to the chicks pipping the timing for the dosage of formaldehyde should go to every 2 hours. This dosage interval of every two hours will allow for consistent formaldehyde ppm levels in the hatcher cabinet throughout the hatching process. The testing that is performed in regards to the safety regulations will dictate when the last dosage can be administered.

Methods of Administration

There are three different methods of administration of formaldehyde into the hatcher cabinets. Keep in mind, these methods are for liquid formaldehyde administration only and you should always adhere to your state/country rules, regulations and safety requirements. Review the provided images and detailed descriptions on the back page for the prescribed methods.

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Figure 1: A hand held device where the dosage can be changed with a dial. The end of this device is placed at an insertion point on the hatcher cabinet to then place formaldehyde into the cabinet.

Figure 2: An IV medical bag where prescribed doses are indicated on the bag and a thumb wheel is used to release the formaldehyde with a gravity flow.

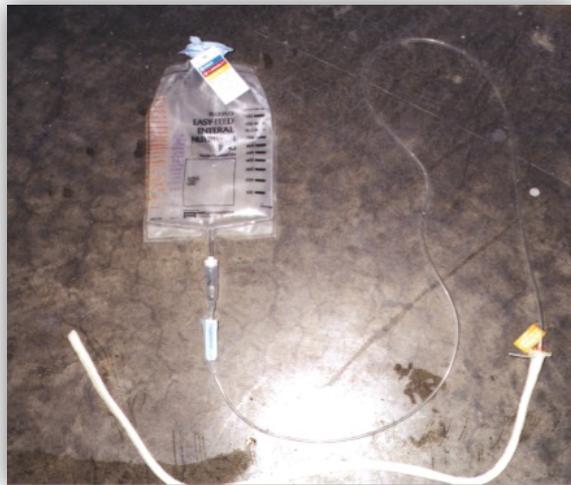


Figure 3: An automated system where a clock and pumps are used to automatically release formaldehyde at prescribed intervals without human interaction.

All of these methods should include a poly tubing system to get the liquid formaldehyde into the hatcher cabinet. Once the liquid is in the cabinet a braided rope made with wicking material should be used to evenly displace the formaldehyde for proper effectiveness. This braided rope will absorb the liquid and should aid in providing proper distribution from the top to the bottom of the hatcher cabinet. The length of this braided rope should be to the bottom of the hatcher floor.

Using these methods, timing figures and dosage calculations will aid in effectively controlling overall bacterial contamination during the hatch process.