Thank you for your purchase of the commercial brine shrimp hatcher. This hatcher is designed to provide maximum circulation, no dead spots and the best hatch possible. To greatly facilitate harvesting, we have provided a smooth turning valve at the bottom. When airflow is cut off, newly hatched nauplii (baby brine shrimp) will concentrate in the lower one-third of the hatcher and are easily removed by drawing off the water through the bottom valve.

Prior to Use
It is important that the cone is supported from one-third to one-half up from the bottom (support stand is included). For proper harvesting, it is important that access to the bottom valve is at least 3 inches from the floor. Prior to use, fill hatcher with fresh water and aerate for 24 hours, drain and rinse well.

Hatching Instructions
We recommend following the instructions provided by the brine shrimp egg (cyst) supplier regarding salinity, pH, temperature and hatching time. However, after many years experience in using these hatchers, we find that some deviations may be made which usually enhance the yield when using small volumes of water.

Salts
Best results are obtained when full-bodied salts are used, not just rock salt. The salt mixture must be well-mixed and aerated before using. A kitchen blender is an excellent way to properly and quickly mix small volumes of salt water. Mix for 3 minutes.

Water Level
Use as little as 1 liter or as much as 17 liters can be used in the hatcher to get good results. We recommend filling to the lower edge of the label on the hatcher. This will prevent cysts from splashing out due to high aeration levels.

Stocking Density
Follow the suggestions of the cyst producer until you need to use the full 17-liter capacity. Our experience has shown that as much as 300 cc (20 tablespoons) of cysts can be produced in 5 gallons of water, provided that premium cysts are used (part no. BS90). Higher densities may be possible if you take the time to clean the hatcher after every use.

Aeration
The hatcher is equipped with a special air diffuser that will fit into the drain hole. This helps keep the eggs from settling in the drain hole. At higher hatching densities we recommend removing the stone to provide heavier aeration. We recommend a rate of .4 cfm or higher fro high density yields. Too little air at high densities will affect your hatch rate.

Temperature
Premium quality cysts hatch in 18 hours, but normal cysts hatch in 23 to 28 hours at 80–85°F (27–30°C). Starting the hatcher with warm water or allowing time for the water to warm before adding cysts reduces hatching time. Be cautious when using the higher range temperature in conjunction with high densities. Hatch can quickly die and foul at high temperatures and low oxygen. We recommend a submersible heater in colder rooms.

Light
Moderate constant light often enhances hatch.

Harvesting Brine Shrimp
1. Remove cap and air line from hatcher after 24 hours.
2. Allow brine shrimp to settle for 10 minutes, but no longer than 15 minutes.
3. A distinct separation occurs with layers of unhatched eggs on the bottom, followed by hatched nauplii just off the bottom and hatched shells on the surface. Older hatchs do not separate as distinctly and a bright light source can be used to help concentrate the nauplii.
4. Open valve slowly and removed unhatched eggs and set aside. Slowly drain hatched nauplii into the collecting cup provided or into a brine shrimp net (150- to 200-micron mesh). Before adding brine shrimp to tank, separate them from the water by concentrating them in a brine shrimp net.
5. Add the nauplii directly into the tank or set them aside for further enrichment or growout.
6. Rinse nauplii in fresh water for a few minutes to remove excess waste and shells (if desired).
7. Unhatched eggs can be set up again and further nauplii can usually be harvested 12 hours later (total 36 hours).

Cleaning Hatcher
1. Thoroughly wash walls of hatcher with soft sponge until slime film is removed. This slime can drastically reduce hatch. Sides should be "squeaky clean." Do not use soap. Wash rigid air line.
2. At times, the hatcher may have to be filled with fresh, lightly chlorinated water (3 ml or 1/2 teaspoon) for several hours. After chlorination, rinse and let dry.
3. We recommend the use of more than one hatcher so that one can be cleaned and allowed to dry while the other is in use.

Warranty
We test each hatcher for leaks and defects. The hatcher is guaranteed against manufacturer defects for 30 days. In order to honor the warranty, the entire hatcher must be returned for replacement. Warranty does not include damage from being dropped or mishandled. Owner assumes all freight costs.