



INVE AQUACULTURE  
REGULAR CYSTS



## PREMIUM GSL ARTEMIA CYSTS WITH HIGH NAUPLII COUNT

### GENUINE GREAT SALT LAKE CYSTS

HATCHING EFFICIENCY UP TO 260,000 NAUPLII/G

EASY TO HATCH

EASY TO ENRICH AND OBTAIN CONSISTENT HIGH  
ENRICHMENT LEVELS

CERTIFIED PRODUCT

INVE Aquaculture offers a wide and specialized range of top quality Artemia cysts from sustainably harvested sources. Our vision is not to market Artemia as a simple commodity, but as a range of advanced and innovative products with specific characteristics and groundbreaking technological innovations to meet the highest productivity and biosecurity standards.

### REGULAR CYSTS

INVE developed the concept and brands of regular cysts more than 30 years ago. Cysts are classified according to their source and characteristics such as hatching, hatching efficiency, speed of development and enrichment.

**TQ** cysts are being harvest from the Great Salt Lake (Utah, USA) and are selected for their consistent high quality.

At Great Salt Lake, the Artemia cysts are carefully harvested and processed as a natural product. The environmental care, respect of stringent laws and focus on sustainable harvesting and management, makes Great Salt Lake Artemia cysts unique in the rearing of top quality shrimp and fish in hatcheries worldwide.

**TQ Artemia** are non-enhanced cysts that hatch readily without the need for a specific treatment during hatching.



A Benchmark  
Company

CARE FOR GROWTH

# TQ Artemia

## PRODUCT DESCRIPTION

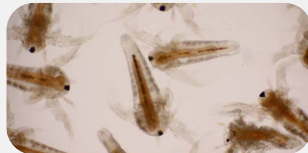
**TQ** is the premium cyst brand of INVE, which originates exclusively from the Great Salt lake in Utah (USA). **TQ** is available at grades up to 260.000 nauplii per gram and is only offered with the addition of a technology.

**TQ** is available with **SEP-Art** technology, for easy separation of pure nauplii; and **D-FENSE**, for Vibrio control during hatching, providing higher biosecurity standards in hatcheries.

## APPLICATION

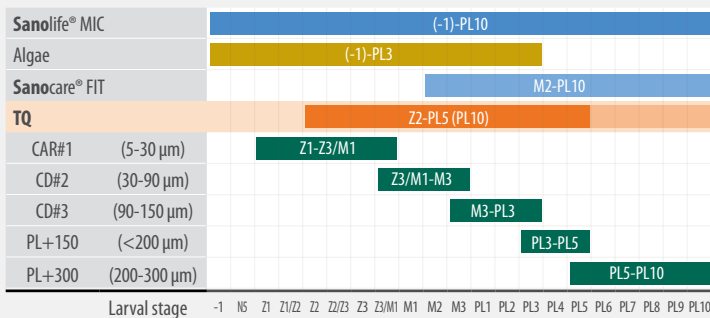
**TQ** cysts is the premium brand for larval fish and crustacean juveniles either as first live feed (shrimp) or after several days of rotifer & specialty Artemia feeding (marine fish). **TQ** type of product is easy to enrich and can be easily boosted with nutritional components that are essential for the successful larviculture production of marine fish and shrimp.

Artemia nauplii are either fed directly to larvae at Instar I or at Instar II/III stage after being further nutritionally enriched.

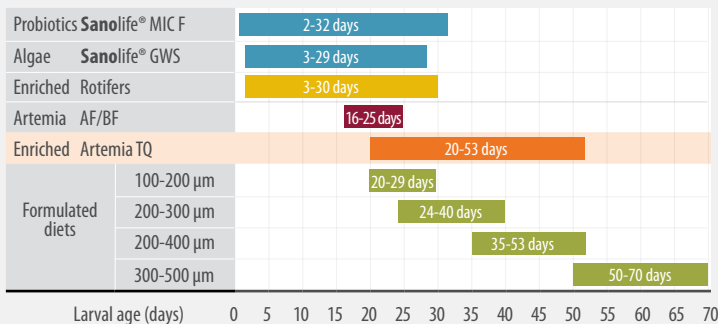


## Typical feeding protocols indicating in which phase Artemia is fed

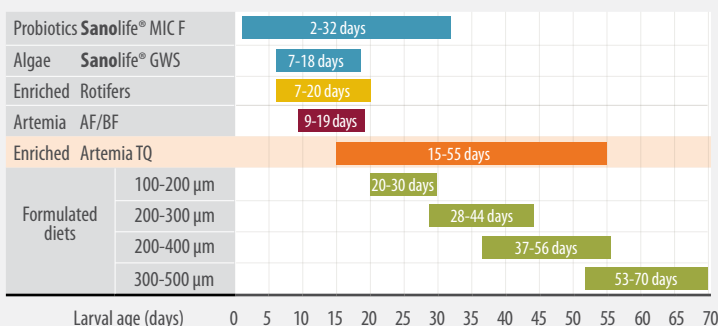
### L. vannamei



### Bream



### Bass



\* protocols should be adapted to local conditions. For further assistance, contact your local representative.

## PACKAGING

425 g/can 12 cans/carton, and 5 kg/alubag 2 alubags/carton

## STORAGE

Store in a dry place below 5°C. Temperature above 5°C can reduce the quality of the product. During storage the packaging should be kept carefully closed. Once opened, the product should be used immediately.

## WHY IT SHOULD BE USED?

### Specifications

- Instar I are directly fed to crustacean larvae
- From Instar II onwards, nutritional properties can be enhanced through enrichment
- Premium brand in terms of hatching output and technology
- Easy to separate nauplii from cyst and shells (**SEP-Art**)
- Easy to enrich & boost with essential nutritional components
- Available in highest grades
- Guaranteed certification

## INSTRUCTIONS FOR USE

### General parameters for optimal Artemia hatching

#### Tank preparation

1. After completion of a hatching, take out all removable parts (pipes, air tubes etc.), rinse and clean them separately with soap. Then disinfect by immersion in a chlorine solution (150 ppm)
2. Rinse the tank walls
3. Thoroughly brush the tank with soap
4. Rinse and repeat exercise with bleach solution
5. Rinse again extensively with water and fill the tank with filtered sea water. Make sure that all cysts and cystshells are removed (e.g. remaining in outlet and in valves of the tank)
6. Disinfect the hatching water with e.g. 10 ppm active chlorine and aerate gently for ±1 hour
7. Deactivate any remaining chlorine by adding 8 ppm sodium thiosulphate

#### Start of hatching

**TQ** Artemia cysts hatch optimally if the parameters listed below are respected.

1. Check the temperature of the water in the hatching tank prior to hatching
2. Aerate vigorously
3. Add the required amount of cysts into the hatching tank
4. Switch on the light and start hatching
5. Check the pH of the medium. The pH should be 8-8.5 during the entire hatching process. If necessary, add dissolved sodium bicarbonate or carbonate (preferably add bicarbonate half an hour before incubation, and immediately before adding the cysts also add 120 ppm of NaOH. In general a second dose of 120 ppm of NaOH will be necessary at T12).

#### Optimal hatching

**Tank shape:** Cylindro-conical or U/V-shaped

**Aeration:** Open ended or perforated PVC pipe

Salinity	Temperature	Light	pH	Cyst density	Oxygen
25-30 ppt	29°C	2000 Lux	8-8.5	2-3g/l	≥4ppm

#### End of hatching

Hatching is ended when the highest number of nauplii are obtained, normally hatching should be terminated within 18-24 h. Subsequently the nauplii can be harvested, rinsed and restocked to enrich.

However, since Artemia is a living organism and cysts are collected from a natural environment incubation time might change from year to year. For further information contact your local INVE representative.



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For more information, please contact your local INVE Aquaculture Service Center or take a minute to visit our free Artemia knowledge hub:  
<http://artemia.inveaquaculture.com>

