



INVE AQUACULTURE
REGULAR CYSTS



THE STANDARD ARTEMIA FOR MARINE FISH AND SHRIMP HATCHERIES

SELECTED ACCORDING TO HATCHING CHARACTERISTICS

EASY TO HATCH

CONSISTENT HATCHING EFFICIENCY

**EASY TO ENRICH AND OBTAIN CONSISTENT
ENRICHMENT LEVELS**

CERTIFIED OUTPUT

REGULAR CYSTS

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

INVE regular cysts are harvested from successfully controlled harvesting sites and are selected for their constant supply of high quality product.

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



A Benchmark
Company

CARE FOR GROWTH

EG Artemia

PRODUCT DESCRIPTION

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 that meet the highest productivity and biosecurity standards.

Non-enhanced cysts were the first Artemia products to be used in aquaculture. Due to their consistency throughout the years, standard working procedures could be established at large scale in hatcheries.

EG Artemia 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

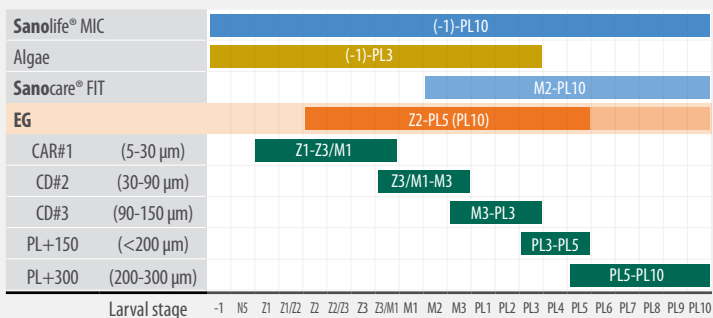
EG cysts are the standard for larval fish and crustacean juveniles either as first live feed (shrimp) or after several days of rotifer & specialty Artemia feeding (marine fish). EG type of product is easy to enrich and can be easily boosted with nutritional components that are essential for the successful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

Artemia nauplii are either fed directly to larvae at Instar I or further nutritionally enriched.

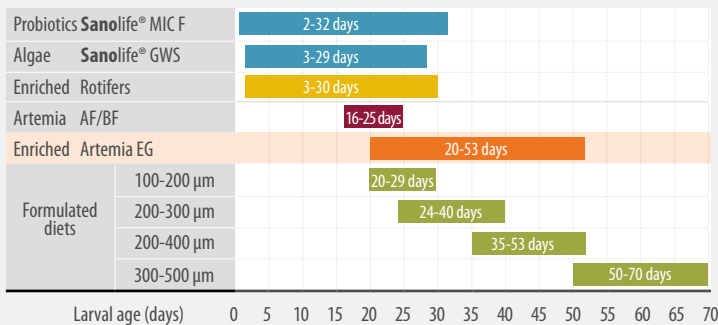
Typical feeding protocols indicating in which phase Artemia is fed



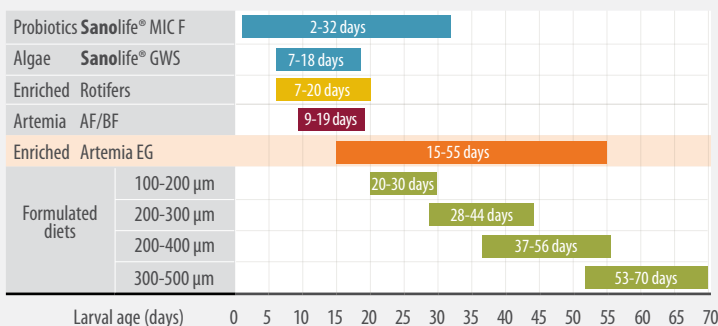
L. vannamei



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
- Easy to enrich & boost with essential nutritional components
- Available in different grades
- Guaranteed INVE quality 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

EG 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.

To the best of our knowledge, the technical data in this technical card is accurate and reliable as of the date of publication. We do not assume any liability for the accuracy and completeness of the above information. Please inspect and test our products in order to satisfy yourself as to the suitability of the products to their particular purpose.

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>

