



## AZOMITE® AS POND FERTILIZER

Regarding the use of AZOMITE® as a pond fertilizer, there are two options:

1. Mexican option (MO) (preferred) and
2. South East Asian option (SEAO)

Granulometria: AZOMITE® Feed Grit o micronizado.

### MEXICAN OPTION (MO) – MULTIPLE DOSES

The MO uses 100 kgs AZOMITE® per hectare per cycle. The 100 kgs AZOMITE® is divided by the number of weeks of the cycle, and the result is added each week throughout the cycle.

For example, if the cycle is 14 weeks. The dose would be  $100 \text{ kgs}/14 \text{ weeks} = \sim 7 \text{ kgs}$ . This would mean that 7 kgs per hectare should be added, each week throughout the cycle.

**ADVANTAGES** - There is a constant addition of AZOMITE® being added to the ponds throughout the entire cycle, with consistent dose levels throughout the cycle.

**ALTERNATIVE** - What some shrimp farmers in the western hemisphere do is to add a “double dose” of AZOMITE®, a few days *before* the ponds are stocked with PLs, meaning they add about 14 kgs per hectare, 2 or 3 days before the ponds are stocked. Then, they do not add any AZOMITE® during the last week of the cycle, because the shrimp don’t need it during that final week. The animals have survived and grown to their maximum size, so there is no point in adding AZOMITE® for the final week of the cycle.

### MEASUREMENTS - TESTING

As part of the protocol for the use of AZOMITE® in cultivated shrimp production, different management methods are used around the world, and everything depends upon the way in which the production manager wishes to run his farm. However, I always ask for, at least, basic measurements to be made during a test cycle (as well as a regular production cycle), simply because almost every production manager in the world measures these same things. Survivals, food conversion ratios and average daily weight gain are the most basis parameters, and everyone uses them to follow the progress of the cycle. On top of these, of course, there are many other things that can be measured, such as pH, oxygen and ammonia levels, turbidity using, eg, a Secchi Disc, and so on, but all of these depend upon the manager’s wishes and methods.

Specifically, for an AZOMITE® test, I would recommend measuring:

1. survivals,
2. food conversion ratio (FCRs),
3. average daily weigh gain (ADG), and
4. Secchi Disc measurements, all vs. controls.



$$\begin{array}{c} \text{100 kgs} \\ \text{AZOMITE®} \\ \text{/ha} \end{array} \div \begin{array}{c} \text{\# semanas} \\ \text{en el ciclo} \end{array} = \begin{array}{c} \text{dosis o aplicacion de} \\ \text{AZOMITE® semanal} \\ \text{durante el ciclo} \\ \text{completo} \end{array}$$

### Alternativo:

2 o 3 días *antes* de sembrar, se aplica 2 x la dosis calculada, y no se aplica el AZOMITE® en la última semana de producción:

$$\begin{array}{c} \text{100 kgs} \\ \text{AZOMITE®} \\ \text{/ha} \end{array} \div \begin{array}{c} \text{\# semanas} \\ \text{en el ciclo} \end{array} = \begin{array}{c} \text{dosis o aplicacion de} \\ \text{AZOMITE® semanal} \\ \text{excepto la última} \\ \text{semana} \end{array}$$

pre-siembra aplicación de 2 x dosis y después, sigue con el protocolo

### SOUTHEAST ASIAN OPTION (SEO) – SINGLE DOSE LEVEL

Every year we sell many thousands of MT of AZOMITE® into the cultivated shrimp industry in South East Asia (Thailand, Vietnam, etc.). The SEAO uses a one-time, single dose level of 200 kgs AZOMITE® per hectare during pond preparation, before filling the ponds, for the entire cycle. The cycle is typically 120 days.

ADVANTAGES – one application.

DISADVANTAGES - Many factors can change during the 120 day cycle in SEA. If, for example, during a cycle, there is a lot of water exchange because of water quality, or infection problems, there is a possibility of losing some of the AZOMITE® during the exchange process.

I do not recommend the SEAO.

*updated 2/2018*