

# Smart Tips for Reef Supplementation

Drs. Foster & Smith Educational Staff



Reef supplements are one of the most beneficial ways to enhance the health and beauty of coral aquariums. They are convenient, easy to use, and allow you to maintain levels of major, minor, and trace elements in your reef aquarium similar to those found in natural seawater. However, improper use of reef supplements can gravely affect your aquarium. Learn what you can do to prevent accidental overdose and the steps to take in the event of an overdose.

## OVERDOSE PREVENTION

Due to their convenience and ease of use, improper supplementation is not uncommon. Calcium is a good example of a reef supplement that is frequently misused. In an attempt to raise calcium levels to promote faster coral growth, many hobbyists add too much calcium. As a result, calcium concentration is pushed to the limits of solution and calcium precipitation is imminent. Once calcium falls out of solution, a chain of events occurs, from the decline in alkalinity and pH levels to a potential total system crash.

To prevent overdose, it is crucial to always read the instructions. Never use more than the recommended amount on the label. Also, keep in mind that a supplementation regimen is not a static endeavor. The supplement requirements of an aquarium are unique and differ from one aquarium to another. Biological uptake, based on stocking levels and growth rates, influences how much and how often supplements should be used. For this reason, you should always test and monitor aquarium parameters before, during, and after supplementation. Never begin a supplement regimen without testing your aquarium for the particular element you wish to supplement first.

I'm having a difficult time maintaining my calcium level. What should I do?

When supplementing aquarium calcium level, it is important to maintain proper alkalinity. In addition, proper magnesium supplementation is crucial to prevent unwanted calcium and carbonate precipitation.

## IN CASE OF AN OVERDOSE

In the event of an accidental overdose, perform a partial water change as soon as possible. Use a quality salt mix that does not contain augmented levels of elements. Test water parameters and if necessary, perform another partial water change (no more than 25%) again in 24 hours to help restore aquarium water parameters.

### TYPICAL VALUES

#### OF NATURAL SEAWATER

Parameter	Average Level
Specific Gravity	1.024-1.026
Temperature	72-84°F
pH	8.0-8.5
Alkalinity	6-8 dKH
Ammonia (NH <sub>3</sub> )	Near 0
Nitrite (NO <sub>2</sub> )	Near 0
Nitrate-Nitrogen (NO <sub>3</sub> )	0.25 ppm
Phosphorus (P <sub>4</sub> )	0.13 ppm
Calcium	380-420 ppm
Magnesium	1,300 ppm
Iodine	0.06 ppm
Strontium	8-10 ppm

### Products you may be interested in:



[Instant Ocean](#)



[Red Sea Magnesium Pro Test Kit](#)