

# Stabilizing Calcium Levels in the Reef Aquarium



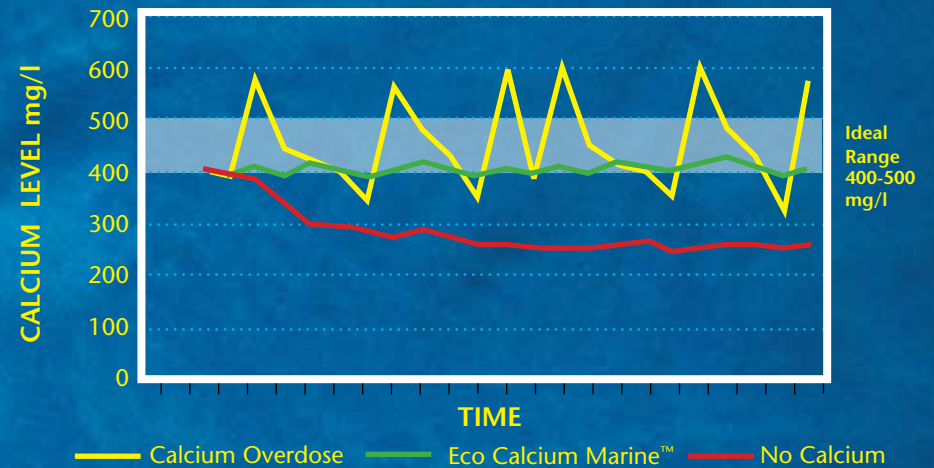
## INTRODUCTION

Calcium is the building block of reef organisms, such as stony corals, encrusting algae, and many other marine invertebrates. Through years of research in the field of captive coral farming and aquaculture it has been determined that a calcium level of 400-500 mg/l is ideal. In reef aquariums, however, calcium levels gradually decline as calcium is incorporated in invertebrate skeletons, encrusting algae, and through natural precipitation. The addition of supplemental calcium to the reef aquarium has proved beneficial and necessary to maintain an actively growing reef aquarium.

## DISCUSSION

The goal of the reef aquarist is to duplicate the natural reef environment as closely as possible. Calcium levels in the world's reefs are very stable. Misapplication of calcium supplements can result in very unstable calcium levels. High concentration, powdered form additives often lead to "roller coaster" calcium level fluctuations. When the calcium level surges above 550 ppm, the excessive calcium combines with carbonates (KH) and precipitates out of the water, rendering it unavailable to reef organisms. This sharp drop in calcium reduces essential carbonates, along with other important elements, and disrupts the stability of the water chemistry. API™ ECO CALCIUM MARINE™ adds controlled levels of calcium and will maintain a stable calcium level without the roller coaster instability associated with some other forms of calcium management. It is recommended that calcium be monitored weekly with a calcium test kit to maintain the desired calcium concentration.

Stabilizing effect of API™ ECO CALCIUM MARINE™ in a reef aquarium



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