Dosing Reef Energy®

Tank Type	Daily Dosage ml / 100 l (25 gal)
SPS Frags	2
Mixed reef	2
SPS dominant	4
ULNS	6

The dosage chart is the recommended starting point for dosing based on a well stocked aquarium, however the dosage may need to be adjusted to the specific needs of your system.

Always monitor the visual appearance of your corals and check for fluctuations in nitrate and phosphate levels particularly in low nutrient tanks.

Typical signs of overdosing are the development of a grey/brown bio-film on the live rocks and outbreaks of algae.

Signs of under-dosing in a low nutrient system are bleaching of the corals from the base upwards.

The signs of over/under dosing the Reef Energy® supplements can also be related to other issues such as too high/low levels of nitrate and phosphate or over/under dosing of Trace-Colors™ elements. Before adjust the dosing of the Reef Energy® make sure that all measurable parameters are at optimal levels.

Important notes:

- Shake well before use.
- Refrigerate after opening.
- DO NOT use dosing caps with this product unless product can remain refrigerated.

Red Sea U.S.A 4687 World Houston Parkway #150 Houston, TX 77032 support.usa@redseafish.com

Red Sea Aquatics (UK) Ltd PO Box 1237

PO Box 1237 Cheddar, BS279AG United Kingdom uk.info@redseafish.com

Red Sea Europe 655 Rue des Frères Lumière 27130 Verneuil d'Avre et d'Iton, France support.fr@redseafish.com

Red Sea Deutschland Büro Deutschland Prinzenallee 7 (Prinzenpark) 40549 Düsseldorf support.de@redseafish.com International Free Trade Industrial Zone Eilat 8814001, Israel Tel: +972 9 956 7107 office@redseafish.co.il

#24654_V19A



www.redseafish.com





Red Sea's Reef Care Program - Recipes®

The complete Reef Care program is the result of years of research into the physiological demands of SPS, LPS & Soft Corals in the reef aquarium. Reef Care Recipes[®] translates the many years of practical experience with Red Sea's Reef Care Program on tens of thousands of diverse reef tanks worldwide into a simple to implement regimen of water management activities specifically for the most common types of hobby reef aquariums. Water management refers to all of the water related activities such as water changes, testing and supplementing that needs to be done on a regular basis to ensure the success of your reef aquarium. This is not just limited to maintaining the ideal balance of the seawater but also deals with controlling nuisance algae and coral nutrition for their long term health and vitality.

In addition to Reef ${\rm Energy}^{\otimes},$ which is fully described below, the complete Reef Care program also includes the following:

Foundation^{∞} – Provides biologically balanced levels of the foundation elements (Calcium, Carbonates and Magnesium) that ensure the optimal water conditions for a sustainable, vibrant coral reef.

Algae Management Program – Controlled nitrate & phosphate reduction that prevents nuisance algae and provides the fine control of Zooxanthellae populations that significantly affect coral growth rates and coloration.

Trace-Colors[™] – Provide the essential minor and trace elements that are part of the coral skeleton and soft tissue and are specifically important for SPS corals to display their natural pigments.

For optimal results you should implement the complete program.

Reef Energy[®] complete coral nutrition

Most of the corals in reef aquariums are considered to be photosynthetic in that they receive the majority of their energy requirements from their photosynthetic, symbiotic Zooxanthellae algae. In nature these corals derive approx 85% of their energy from the Zooxanthellae and produce the remaining 15% in their soft tissue by metabolizing nutrients that are available in the surrounding water.

Non-photosynthetic corals (such as Gorgonia, Dendronephthya and Sun Corals) and other filter feeders derive all of their energy from nutrients that are in the surrounding water.

It is therefore essential to provide a balanced mix of the carbohydrates, vitamins, amino & fatty acids to meet the corals energy demands. The amount of coral nutrients required will be dependent on the type of corals stocked. The nutritional requirements of SPS corals in particular are also dependent on the levels of algae nutrients (nitrate & phosphate) in the water. In reduced algae nutrient systems e.g. when using Red Sea's NO₃:PO₄:X, the amount of energy the corals receive from the Zooxanthellae is significantly reduced and therefore higher levels of coral nutrients must be provided to meet the corals energy demands.

Due to undesirable interactions between the various components necessary to meet the complete nutritional requirements of the corals, Red Sea's Reef Energy® nutrition program is divided into 2 complimentary products.

Reef Energy® A is a unique formulation of carbohydrates, amino acids, fatty acids and suspended proteins flocks that are available for direct consumption and absorption by the corals. Every component has been proven to be utilized in the metabolic processes of coral protein production and soft tissue regeneration and therefore does not introduce any unnecessary organic material to the system. Reef Energy® A stimulates extension of the polyps and soft tissue helping the coral to optimize nutrient consumption by expanding its surface area for absorption.

Reef Energy® B is a highly concentrated complex of Vitamins & Amino acids that were found to be the limiting factors in the nutritional demands of corals and other invertebrates. This complex replenishes the exact vitamins and MAA (marine amino acids) produced by Zooxanthellae. Vitamins are important precursors in the synthesis of chromo proteins while the amino acids are their building blocks. All of the components of Reef Energy® B come from marine sources and are emulsified in a unique medium that enhances their solubility and absorption of the vitamins and acids by the corals.

Instructions for supplementing corals with Reef Energy®

- 1. Treat your aquarium according to the most demanding even if not the most prevalent type of coral.
- The dosing charts are based on treating 100 liters / 25 gallons of water. Estimate your total volume of water (aquarium & sump less volume of live rocks etc) to calculate the correct dosage for your system.
- 3. Always add equal parts of the Reef Energy® A & B at every supplementing.
- Reef Energy[®] A & B can be mixed together directly before supplementing. Do not save any unused mixture.
- Turn off the protein skimmer before feeding and leave off for 15 to 30 minutes afterwards. Leave gentle circulation in the aquarium at all times.
- 6. Reef Energy[®] should be added directly to the aquarium.
- 7. For delicate corals (Sun Corals, Goniopora) give a mixture directly to the corals with a pipette.
- If you miss one or more days of using Reef Energy[®] do not add the amount that you have missed and resume the dosing at the current daily dose.