

Dosing Reef Energy

Tank Type	Daily Dosage ml / 100 l (25 gal)
Soft Corals	1
LPS	2
SPS - Accelerated Growth / Mature	2
SPS - Enhanced Colors (low nutrients)	4

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 Reef Colors elements. Before adjust the dosing of the Reef Energy make sure that all measurable parameters are at optimal levels.

GB

REEF CARE PROGRAM Reef Energy

Complete Coral Nutrition



Red Sea U.S.A.
18125 Ammi Trail
Houston, TX 77060
Tel: 1-888-RED-SEA9
redseainfo@redseafish.com

Red Sea Europe
ZA de la St-Denis
F-27130 Verneuil s/Avre,
France
Tel: (33) 2 32 37 71 37
info@redseaeurope.com

Red Sea | Arcadia - Germany
Hauptstrasse 37
40699 Erkrath
Tel: (49) 2104 17757 0
info@redseafish.de

Red Sea | Arcadia - UK
8 in Centre
Salbrook Road
Redhill RH1 5GJ
Tel: +44 (0)1737 723838
sales@redsearcardia.co.uk

International
Free Trade Industrial Zone
Eilat 88000, Israel
Tel: +972 9 956 7107
office@redseafish.co.il

#22991



Red Sea's Reef Care Program

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. The complete program has been divided into 4 distinct but complimentary sub-programs according to the various biological processes that take place.

In addition to Reef Energy, which is fully described below, the complete Reef Care program also includes the following:

Reef 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 Control 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.

Reef 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.
2. 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.
4. Reef Energy A & B can be mixed together directly before supplementing. Do not save any unused mixture.
5. 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.
8. 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.