

Tank
REEFER 425

Net size
386 liter

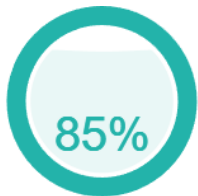
Reason for analysis

Barcode
LPDK-JRX-5KAD-RJ6S (ID: 253894)

Created
11/12/2023

Arrived in the laboratory
11/20/2023

Evaluated
11/21/2023



Quality assessment:
The quality of your aquarium water is assessed using the score in the circle. The closer it is to 100, the better the quality. You can also use the bar chart to identify the areas in which problems may occur.

Major elements	95 / 100
Minor elements	85 / 100
Pollutants	100 / 100
Base elements	92 / 100

Results of Salt water

Base elements

Sal. total	32.66 PSU	DECREASED
Salinity	Ideal value: 35.00 PSU	Attention
KH	8.42 °dKH	TOP
Carbonate hardness	Ideal value: 7.50 °dKH	Near nature

Major elements

Cl	18629 mg/l	TOP
Chloride	Ideal value: 18199 mg/l	Near nature
Na	9871 mg/l	TOP
Sodium	Ideal value: 10110 mg/l	Near nature
Mg	1336 mg/l	TOP
Magnesium	Ideal value: 1209 mg/l	Near nature
S	840.3 mg/l	TOP
Sulfur	Ideal value: 836.4 mg/l	Near nature
Ca	393.7 mg/l	TOP
Calcium	Ideal value: 386.9 mg/l	Near nature
K	365.4 mg/l	TOP
Potassium	Ideal value: 375.0 mg/l	Near nature
Br	87.54 mg/l	INCREASED
Bromine	Ideal value: 61.58 mg/l	Attention
Sr	9.22 mg/l	INCREASED
Strontium	Ideal value: 7.35 mg/l	Attention
B	4.30 mg/l	TOP
Boron	Ideal value: 4.14 mg/l	Near nature
F	1.00 mg/l	TOP
Fluorine	Ideal value: 1.19 mg/l	Near nature



Minor elements

Li Lithium	334.5 µg/l Ideal value: 156.3 µg/l	TOP Near nature
Si Silicon	162.6 µg/l Ideal value: 91.91 µg/l	TOP Near nature
I Iodine	20.25 µg/l Ideal value: 59.74 µg/l	TOO LITTLE Critical
Ba Barium	6.85 µg/l Ideal value: 9.19 µg/l	TOP Near nature
Mo Molybdenum	9.10 µg/l Ideal value: 11.03 µg/l	TOP Near nature
Ni Nickel	--- Ideal value: 0.46 µg/l	TOP Near nature
Mn Manganese	--- Ideal value: 0.92 µg/l	DECREASED Attention
As Arsenic	--- Ideal value: 0.46 µg/l	TOP Near nature
Be Beryllium	--- Ideal value: 0.09 µg/l	TOP Near nature
Cr Chrome	--- Ideal value: 0.46 µg/l	TOP Near nature
Co Cobalt	--- Ideal value: 0.09 µg/l	TOP Near nature
Fe Iron	--- Ideal value: 0.46 µg/l	DECREASED Attention
Cu Copper	--- Ideal value: 0.46 µg/l	TOP Near nature
Se Selenium	--- Ideal value: 0.46 µg/l	TOP Near nature
Ag Silver	--- Ideal value: 0.09 µg/l	TOP Near nature
V Vanadium	--- Ideal value: 1.38 µg/l	DECREASED Attention
Zn Zinc	--- Ideal value: 1.84 µg/l	TOO LITTLE Critical
Sn Tin	--- Ideal value: 0.46 µg/l	TOP Near nature

Nutrients

NO3 Nitrate	0.00 mg/l Ideal value: 2.00 mg/l	DECREASED Attention
P Phosphorus	10.14 µg/l Ideal value: 13.79 µg/l	DECREASED Attention
PO4 Phosphate	0.03 mg/l Ideal value: 0.04 mg/l	TOP Near nature

Pollutants

Al. Aluminium	5.79 µg/l Ideal value: 0.09 µg/l	TOP Near nature
Sb Antimony	--- Ideal value: 0.09 µg/l	TOP Near nature
Bi Bismuth	--- Ideal value: 0.09 µg/l	TOP Near nature
Pb Lead	--- Ideal value: 0.09 µg/l	TOP Near nature
Cd Cadmium	--- Ideal value: 0.18 µg/l	TOP Near nature
La. Lanthanum	--- Ideal value: 0.00 µg/l	TOP Near nature
Tl Thallium	--- Ideal value: 0.09 µg/l	TOP Near nature
Ti Titanium	--- Ideal value: 0.09 µg/l	TOP Near nature
W Tungsten	--- Ideal value: 0.00 µg/l	TOP Near nature
Hg Mercury	--- Ideal value: 0.00 µg/l	TOP Near nature

Results of Osmosis water

Minor elements

Li Lithium	18.40 µg/l Ideal value: 0.00 µg/l	TOO HIGH Critical
Si Silicon	--- Ideal value: 0.00 µg/l	TOP Near nature
Ba Barium	--- Ideal value: 0.00 µg/l	TOP Near nature
Mo Molybdenum	--- Ideal value: 0.00 µg/l	TOP Near nature
Ni Nickel	--- Ideal value: 0.00 µg/l	TOP Near nature
Mn Manganese	--- Ideal value: 0.00 µg/l	TOP Near nature
As Arsenic	--- Ideal value: 0.00 µg/l	TOP Near nature
Be Beryllium	--- Ideal value: 0.00 µg/l	TOP Near nature
Cr Chrome	--- Ideal value: 0.00 µg/l	TOP Near nature
Co Cobalt	--- Ideal value: 0.00 µg/l	TOP Near nature
Fe Iron	--- Ideal value: 0.00 µg/l	TOP Near nature
Cu Copper	--- Ideal value: 0.00 µg/l	TOP Near nature
Se Selenium	--- Ideal value: 0.00 µg/l	TOP Near nature
Ag Silver	--- Ideal value: 0.00 µg/l	TOP Near nature
V Vanadium	--- Ideal value: 0.00 µg/l	TOP Near nature
Zn Zinc	--- Ideal value: 0.00 µg/l	TOP Near nature
Sn Tin	10.05 µg/l Ideal value: 0.00 µg/l	TOO HIGH Critical

Nutrients

P Phosphorus	--- Ideal value: 0.00 µg/l	TOP Near nature
PO4 Phosphate	--- Ideal value: 0.00 mg/l	TOP Near nature

Pollutants

Al.	---	TOP
Aluminium	Ideal value: 0.00 µg/l	Near nature
Sb	---	TOP
Antimony	Ideal value: 0.00 µg/l	Near nature
Bi	---	TOP
Bismuth	Ideal value: 0.00 µg/l	Near nature
Pb	---	TOP
Lead	Ideal value: 0.00 µg/l	Near nature
Cd	---	TOP
Cadmium	Ideal value: 0.00 µg/l	Near nature
La.	---	TOP
Lanthanum	Ideal value: 0.00 µg/l	Near nature
Tl	---	TOP
Thallium	Ideal value: 0.00 µg/l	Near nature
Ti	---	TOP
Titanium	Ideal value: 0.00 µg/l	Near nature
W	---	TOP
Tungsten	Ideal value: 0.00 µg/l	Near nature
Hg	---	TOP
Mercury	Ideal value: 0.00 µg/l	Near nature

Recommendations

The following recommendations were calculated for the aquarium **REEFER 425** with **386 liters** content.

Recommended actions

Bromine	Recommended
Reduce/stop addition of bromide to bring value down to 65-67 mg/l.	
Strontium	Recommended
Reduce/stop addition of strontium to bring value down to 7,8-8,2 mg/l.	
Phosphorus	Recommended
Dose 1.93 ml Nutrition P per day. Reduce the dose if the home test shows more than 0.03 mg/l PO4.	
Nitrate	Recommended
Dose 1.93 ml Nutrition N per day. Reduce the dose if the nitrate value exceeds 2 mg/l.	
Salinity	Recommended
Increase the salinity to 35 PSU. For example, add 1544 ml Absolute Ocean #1 and 1544 ml Absolute Ocean #2 to the aquarium.	
Tin	Osmosis
Volume of mixed bed resin filter may not be sufficient (1 liter volume of mixed bed resin should be used per 120 liters of daily output of the osmosis system)	
Lithium	Osmosis
Volume of mixed bed resin filter may not be sufficient (1 liter volume of mixed bed resin should be used per 120 liters of daily output of the osmosis system)	

Iodine (I -1000 ml bottle)

Important

Addition Total: 15.25 ml
Divide the addition into portions: twice 7.62 ml *

Iodine (I -alt. 100 ml bottle)

Important

Addition Total: 1.52 ml
Divide the addition into portions: twice 0.76 ml *

Vanadium (V)

Recommended

Addition Total: 2.66 ml
Divide the addition into portions: twice 1.33 ml *

Zinc (Zn)

Recommended

Addition Total: 3.55 ml
Divide the addition into portions: once 3.55 ml

Manganese (Mn)

Recommended

Addition Total: 1.77 ml
Divide the addition into portions: once 1.77 ml

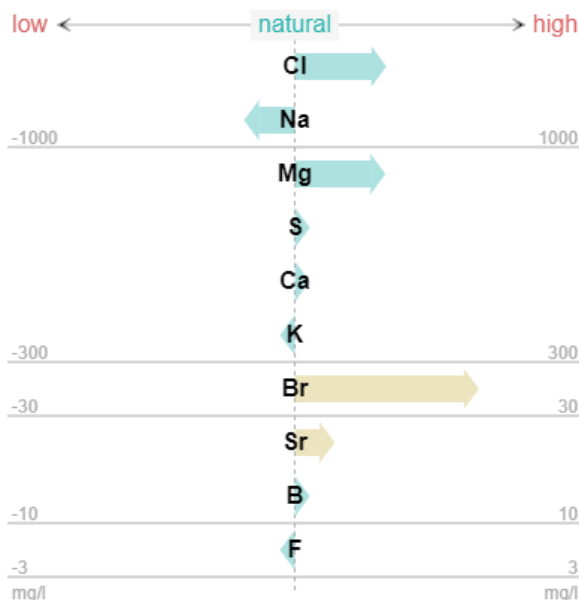
Iron (Fe)

Recommended

Addition Total: 0.89 ml
Divide the addition into portions: five times 0.18 ml *

* Only one portion should be dosed per day.

Diagrams

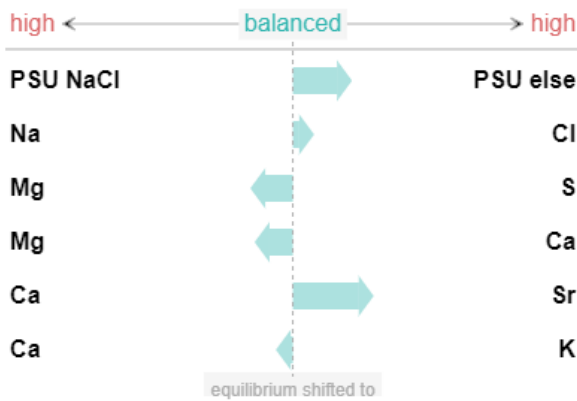


Composition of the aquarium water

The diagram shows whether the concentrations of the major elements in your water sample match the measured salinity or whether individual elements are increased or reduced. Note the different concentration ranges on the x-axis.

Background: Natural seawater consists of the same elements in fixed proportions. Only the concentrations of the elements increase or decrease in proportion to salinity. That is why the ideal values also change with salinity.

Green arrow
Value is relatively natural.
Yellow arrow
Value is becoming increasingly unnatural.
Red arrow
Value unnatural.



Element ratios

This chart shows whether the element supply is appropriate or whether the ratios of certain element pairs are skewed due to an imbalanced supply. The arrow points in the direction of the element with increased concentration. Only the relationship between the elements is evaluated. The evaluation of the individual measured values may vary.

Background: The reef inhabitants remove various elements from the aquarium water. To compensate for this consumption and obtain water that is true to nature, water changes are carried out and water additives are used. This does not always work as needed.

Green Arrow

Relationship close to nature.

Yellow arrow

Ratio slightly shifted.

Red arrow

Ratio shifted drastically.



Growth Factors

This diagram shows whether important growth factors are in balance or out of proportion. The arrow points in the direction of the factor with increased concentration. Only the relationship between the factors is evaluated. The evaluation of the individual measured values may vary.

Background: The most important growth factors include carbonate hardness, calcium concentration and phosphorus content. When these values are slightly increased, growth is usually encouraged, while greatly increased or reduced values slow growth. If there is an imbalance between these factors, it can adversely affect coral growth and, in the worst case, lead to tissue necrosis.

Green arrow

Balance between factors OK.

Yellow arrow

Factors increasingly disproportionate to one another.

Red arrow

Factors in disproportion to one another.