REEF ICP TEST

FAUNA MARIN ICP LAB

Sample number:	**218**
Client name:	**Christopher Harrison**
Sample type:	Seawater
Volume aquarium in Liter:	300
Sample name:	Downstairs Marine
Sampling date:	07.02.20
Date of receipt:	13.02.20
E-Mail:	cnharrison13.ch@gmail.com

Method: SRL specifically for seawater using ICP-OES (inductively coupled plasma with optical emission spectrometry).

Recommended values are optimized for coral reef aquariums.

Values in orange require action.

To resolve a deficiency, the quantity of Fauna Marin Elementals to be dosed is displayed adapted to your aquarium. A click on the product name takes you directly to the shop.

Further help can be found here:

Fauna Marin Forum

Reef 2 Reef

Fauna Marin Reefing Group on Facebook

Major elements and halogens in mg/liter (1 mg = 0,001 g)						**Recommended dosage Elementals**		
		measured	**reference range**			**in ml**	**spread over ... days**	**Product**
Sodium	Na	12639	9500	- 10700 -	11500			
Sulphur	S	>1204	850	- 900 -	950			
Potassium	K	532	380	- 395 -	420	water change		Elementals K
Boron	B	6,08	3,8	- 4,5 -	5,5			Elementals B
Magnesium	Mg	1685	1200	- 1350 -	1450	water change		Elementals Mg
Calcium	Ca	635	400	- 425 -	440	water change		
Strontium	Sr	13,19	6,5	- 8 -	9			Elementals Sr
Iodine (Total Iodine)	I	0,025	0,055	- 0,065 -	0,08	12	2	Elementals Trace I
Bromine	Br	**72,20**	55	- 67 -	75			Elementals Br

Macronutrients in mg/liter (1 mg = 0,001 g)						**Recommended dosage Elementals**		
		measured	**reference range**			**in ml**	**spread over ... days**	**Product**
Phosphorus (ICP-OES)	P	0,17	< 0,06					Elementals P
Total Phosphate (calculated)	PO_4^{3-} tot.	0,52	0,02	-	0,10			
Silicon (ICP-OES)	Si	**0,11**	0,1	-	0,2			

Physiologically relevant trace elements and color-relevant micronutrients in µg/liter (1 µg = 0,000001 g)						**Recommended dosage Elementals**		
		measured	**reference range**			**in ml**	**spread over ... days**	**Product**
Zinc	Zn	9,04	3	-	8			Elementals Trace Zn
Vanadium	V	1,42	2	-	10	3	3	Elementals Trace V
Copper	Cu	1,89	2	-	6	6	2	Elementals Trace Cu
Nickel	Ni	n.n.	3	-	6	3,4	2	Elementals Trace Ni
Manganese	Mn	0,28	0,10	-	0,25			Elementals Trace Mn
Molybdenum	Mo	3,03	10	-	20	6	2	Elementals Trace Mo
Iron	Fe	**0,70**	0,05	-	2,5			Elementals Trace Fe
Chrome	Cr	n.n.	0,05	-	2,3	7	3	Elementals Trace Cr
Cobalt	Co	**0,43**	0,02	-	1,9			Elementals Trace Co

Other trace elements und potentially harmful substances in µg/liter (1 µg = 0,000001 g)						**Recommended dosage Elementals**		
		measured	**reference range**			**in ml**	**spread over ... days**	**Product**
Lithium	Li	225	180	-	350			Elementals Trace Li
Barium	Ba	**61**	20	-	50			Elementals Trace Ba
Aluminium	Al	**3,84**	5	-	30			
Antimony	Sb	**n.n.**	< 10					
Tin	Sn	**n.n.**	< 10					
Beryllium	Be	**n.n.**	0,1	-	1,4			
Selenium	Se	**n.n.**	0,9	-	5,5			
Silver	Ag	**n.n.**	< 10					
Tungsten	W	**n.n.**	< 30					
Lanthanum	La	**n.n.**	2	-	10			
Titanium	Ti	**n.n.**	0,5	-	3,5			
Scandium	Sc	**n.n.**	0,1	-	1,0			
Zirconium	Zr	**n.n.**	1,0	-	2,2			
Arsenic	As	**n.n.**	< 1					
Cadmium	Cd	**n.n.**	< 1					
Mercury	Hg	**n.n.**	< 1					

Measured values of type "> 24" indicate that the concentration is above the calibrated range and therefore cannot be definitely determined. In these cases the highest detectable value is indicated (e.g. 24 µg/l), the actual value may be higher. Abbreviations: n.g. (not measured), n.n. (not detectable).