Phosphate- $X_{globuli}$



AquaCare GmbH & Co. KG Am Wiesenbusch 11 • D-45966 Gladbeck • Germany № 0 20 43 - 37 57 58-0 • ♣ 0 20 43 - 37 57 58-90

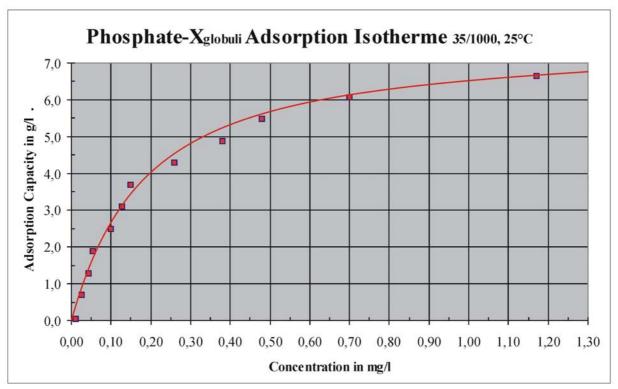
www.aquacare.de • info@aquacare.de



Phosphate is a very important nutrient and should never miss. But if the water contains too much phosphate green and cyano-bacteria (blue-green algae) are growing rapidly and hard corals will be destroyed. In the modern reef aquaristic the phosphate concentration should be between 0.05...0.20 mg/l (ppm). AquaCare Phosphate X_{globuli} have following advantages:

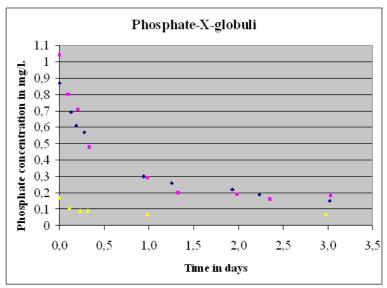
- high performance
- safe adsorption
- no dust
- regular size; perfect for moving bed technology
- no release of soluble iron
- no release of colour

Technical data	
Matrix	Porous polystyrene, impregnated with iron hydroxide nano particles
Size of balls	0.41.2 mm diameter
Whole balls	minimum 95%
Bulk density	790820 g/l
Temperature range	080°C
pH range	4.58.5
Salinity	040 ppt (suitable for fresh and sea water)
Packaging unit	1 litre: order number 578-010
	25 liters: order number 578-250



The efficiency of an adsorber is shown in the adsorption isotherm. In the graphic above the maximum adsorption capacity is drawn against the wished maximum phosphate concentration. If you wish to have a maximum phosphate concentration of 0.5 mg/l (ppm) one litre AquaCare Phosphate $X_{globuli}$ in sea water at 25° C is able to adsorb 5 grams phosphate; is the maximum limit at 0.2 the capacity is about 4 grams.





Picture: typical decline of the phosphate concentration in a sea water aquarium with a high (blue, purple) and low

(yellow) level of phosphate while using Phosphate- $X_{globuli}$. The loaded PMR filter was started at day 0. Within 3 days the high phosphate concentration drops below the harmful concentration of 0.2 ppm.

To prevent an increase of the phosphate concentration at low levels the service life will least several weeks depending on the size of the aquarium, the size of the PMR filter, and the input of phosphate (e.g. feeding). Not before the concentration reaches the upper limit the Phosphate-X_{globuli} have to replaced.