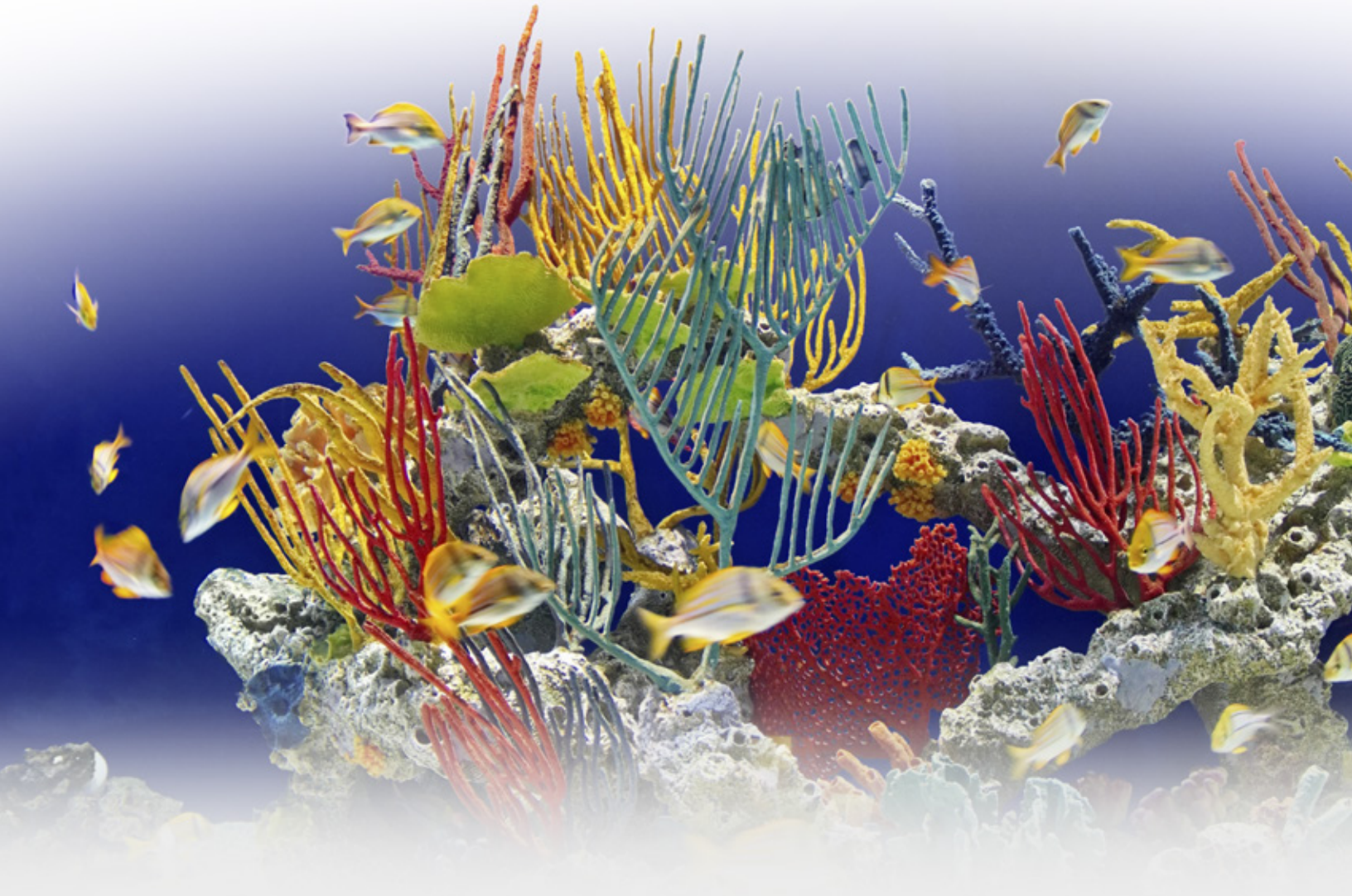


# QUALITY REMOVES.



**Synthetic iron oxide adsorbers**  
to reduce phosphates in aquarium water

**X** Bayoxide®

**QUALITY WORKS.**

**LANXESS**  
Energizing Chemistry

# BAYOXIDE® EFFECTIVE PHOSPHATE REDUCTION FOR AQUARIUMS

Aquariums enjoy great popularity. In many cases, however, they require a great deal of maintenance to protect the animals and plants – and ultimately to keep them looking beautiful. In this context, the phosphate level in the water plays an important role. Excessive phosphate causes increased algae growth in freshwater aquariums and serious harm to fish and corals in saltwater aquariums.

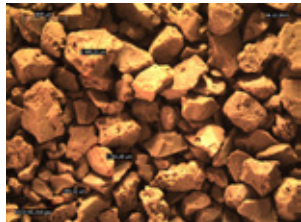

Phosphate levels in freshwater aquariums should not exceed 0.50 mg/l. The recommended range for saltwater aquariums is between 0.02 and 0.10 mg/l. LANXESS has developed two synthetic iron oxides in granular form specifically for use in aquariums that quickly and effectively reduce the phosphate concentration in the water.

## Bayoxide® – the ideal solutions for clean aquarium water

Bayoxide® E 33 has been developed specially to remove phosphates from fresh water, and on account of its large specific surface achieves rapid and long-lasting phosphate bonding. Compared to conventional adsorption media, the high iron content of the product also significantly increases absorption capacity, which in turn extends filter life.

Bayoxide® E 33 HC has a significantly higher absorption capacity, particularly in saltwater aquariums. An additional advantage is the increased mechanical stability of the product. Even when severely stressed, the water remains clear and does not discolor during treatment with this specialty product.

### Technical product data – an overview

| Properties                               |             | Bayoxide® E 33  | Bayoxide® E 33 HC  |                        |
|--|-------------|---|--|------------------------|
|  |             |  |  |                        |
| FeOOH content (dry weight)               |             | > 99  | > 99   | [%]                    |
| Bulk density                             |             | 0.45 – 0.60   | 0.75 – 0.95  | [g/ml]                 |
| specific surface BET                     |             | 150   | 300  | [m²/g]                 |
| Avg. particle size                       |             | 0.4 – 1.9   | 0.6 – 1.9  | [mm]                   |
| Max. moisture content                    |             | 20  | 20   | [%]                    |
| Abrasion stability of the washed product | Shaker test | 2 - 5   | 0.5 - 2  | [%]                    |
| Absorption capacity (% by weight)        | Fresh water | 11.5  | 8,5  | [% PO <sub>4</sub> ]   |
|  | Salt water  | 2.7   | 6.6  | [% PO <sub>4</sub> ]   |
| Absorption capacity (by volume)          | Fresh water | 64.6  | 75.4   | [g PO <sub>4</sub> /l] |
|  | Salt water  | 15.0  | 58.7   | [g PO <sub>4</sub> /l] |
| Appearance                               |             | Granules  | Granules   |                        |

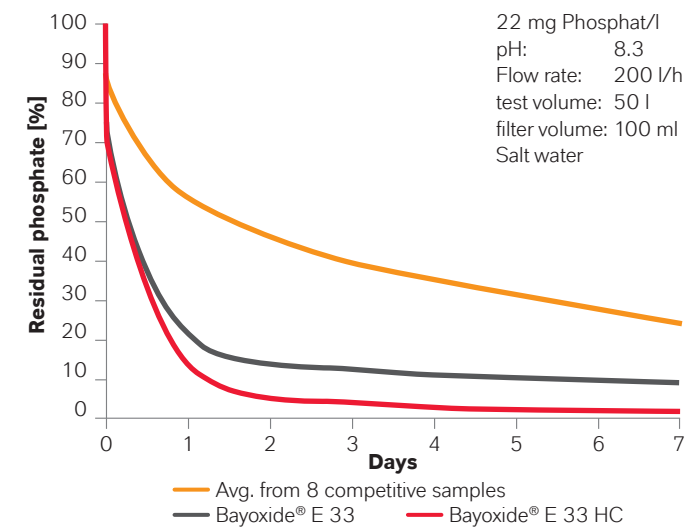
# ALL THE BENEFITS AN OVERVIEW

- Faster and more effective reduction of phosphate and silicate
- Can be used in fresh water and salt water
- Extends filter life
- Extraordinarily high absorption capacity, particularly Bayoxide® E 33 HC in salt water

- Very high mechanical stability, particularly Bayoxide® E 33 HC
- No discoloration or clouding
- Long shelf life

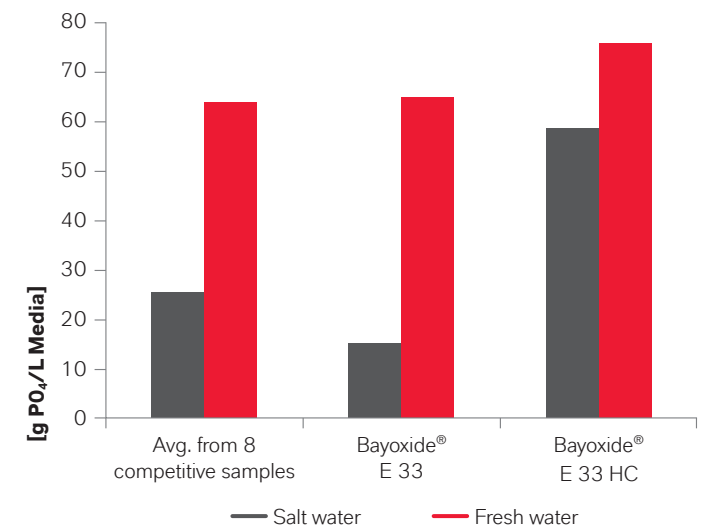
### High effectiveness

Bayoxide® E 33 and Bayoxide® E 33 HC produce a rapid and long-lasting reduction in phosphate levels.



### Long filter life

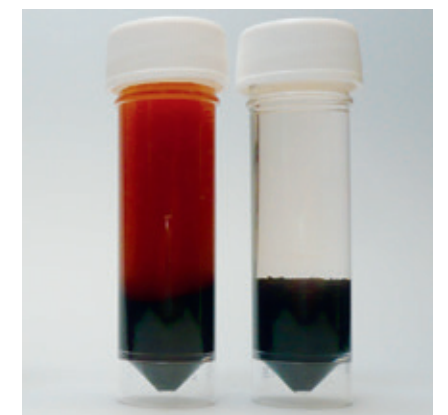
Compared to many conventional adsorber media, Bayoxide® E 33 HC has a particularly high absorption capacity, which maximizes filter life.



### No discoloration or clouding

Bayoxide® E 33 HC is characterized by its particularly high abrasion stability.

If it is pre-washed, Bayoxide E 33 HC yields almost no further fines, even when mechanically stressed.



unwashed washed



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