

Defining Important Aquarium Water Parameters

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The health of your aquarium inhabitants depends on maintaining proper water parameters. And regular routine testing is the only accurate way to be certain water parameters are within an acceptable range.

SOME IMPORTANT PARAMETERS TO BE AWARE OF INCLUDE:

pH A measurement of acidity or alkalinity in your water. Maintaining appropriate pH level for your specific aquarium inhabitants is vital for their health.

Alkalinity Also called carbonate hardness, is the measurement of dissolved carbonate and bicarbonate concentration in water. Carbonate hardness plays a vital role in stabilizing pH in the aquarium and should be monitored, especially in marine aquariums.

ORP (Oxidation Reduction Potential) Also called REDOX, measures your aquarium water's ability to oxidize or reduce contaminants.

CALCIUM Proper calcium levels are essential for successful reef aquariums. Corals require calcium for growth, and regular testing alerts you when calcium supplementation is required.

OXYGEN (O₂) Proper oxygen level is essential for healthy fish and efficient biological filtration. Chronic low oxygen levels can increase fish susceptibility to disease.

CONDUCTIVITY Measurement of how well water conducts electricity. The higher the conductivity, the more minerals and impurities (inorganic salts) present in the water. Pure water has low conductivity.

SALINITY The amount of dissolved salts in water. Essential parameter for saltwater aquariums and freshwater aquariums conditioned with aquarium salt.

AMMONIA, NITRITE & NITRATE The presence of these nitrogen compounds indicate how well your biological filter is breaking down wastes in your aquarium.

TESTING

Through regular [testing](#), you gain deep insight into your aquarium, allowing you to recognize trends and diagnose problems for timely adjustments and maintenance. Test these parameters with [monitors and testers](#).

RELATED INFORMATION

- [Maintaining Proper Water Quality in the Home Aquarium](#)
- [How to Maintain Proper Specific Gravity](#)
- [How to Calibrate Electronic Testers](#)