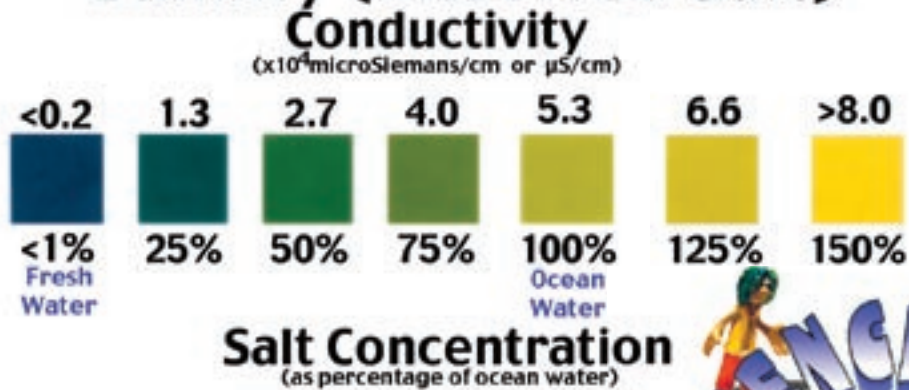


# Salinity (Dissolved Salt)



## Salinity (Dissolved Salt)

### Colorimetric test strips

Testing for Salinity of Salt and Brackish water is very common when monitoring tidal water, bays, estuaries and water wells near the ocean. Distinguishing between salt and fresh water with a pH between 5.5 to 9.5 is very quick and easy with these test strips.

The color chart allows you to read Salinity or Dissolved Salt as Conductivity or as a percentage of average Ocean water salt concentration.

This test reports Salt concentration levels in water at: <math><0.2</math>, 1.3, 2.7, 4.0, 5.3, 6.6 and >8.0 (10 microSiemens/cm or  $\mu\text{S}/\text{cm}$ ). Results are obtained from this test in about 1 minute.

Salinity is simply a measure of the amount of salt dissolved in the water. Salts are substances such as common table salt (sodium chloride, NaCl), limestone (calcium carbonate,  $\text{CaCO}_3$ ) and many others. They are picked up by the groundwater as it passes through the rocks and soils that make up the aquifer.

Low levels of these salts are vital to the growth of aquatic plants

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and animals, but high levels can cause problems for aquatic life and for human uses, such as for potable water and crop irrigation.

Conductivity is measured in microSiemens/centimeter ( $\mu\text{S}/\text{cm}$ ). A microSiemen is the same as a micromho. Conductivity of a water sample is a measure of its ability to carry an electric current. The more impurities (total dissolved solids) in water, particularly salts, the greater its electrical conductivity.

By measuring the conductivity of a water sample, the amount of total dissolved solids in the sample can be determined. To convert the electrical conductivity (microSiemens/cm) of a water sample to the concentration of total dissolved solids (ppm) in the sample, the conductivity must be multiplied by a factor of between 0.54 and 0.96 for natural waters. The value of this factor depends upon the type of dissolved solids. A widely accepted value to use when you are not determining the type of dissolved solids is 0.67.

$$\text{TDS (ppm)} = \text{Conductivity (microSiemens/cm)} \times 0.67$$