

TOTAL DISSOLVED SOLIDS (TDS)

TDS is a combined measure of all organic and inorganic materials in the water, including minerals, salts, metals. These substances are primarily inorganic salts, principally Calcium, Magnesium, Sodium, Potassium, bicarbonate, chloride, and sulfate. It is accurately measured by evaporating an amount of water sample and then weighing the dried solids.

Dissolved minerals in drinking water can come from natural sources, like rocks being dissolved as water flow across them, and as a result of human activities, including the chemicals used in water treatment processes, and the piping and fixtures used to convey the water.

The level of total dissolved solids in the water does not necessarily give useful information about the hardness, metal content, or salt content, nor can it tell you about the bacterial quality of your drinking water. Only by performing a comprehensive water quality test, will we be able to determine whether anything harmful is in the drinking water.

LEVEL OF TDS* (parts per million)



*Source: Kineticopro[®] Proprietary Patron Research Study, 0719

SYMPTOMS: High levels of TDS can impact beverage quality, create an off taste in beverages, and cause cloudiness in ice. It is critical to know what the hardness is made of. For example, if TDS is due to high water hardness it can cause hardness scaling and equipment damage, and high Chloride can cause corrosion of stainless steel.

APPLICATIONS AFFECTED: Coffee/tea brewers, steamers/combi-ovens, boilers, ice makers, and fountain beverage machines.

TREATMENTS: A Reverse Osmosis system can be the best solution to reduce drinking water TDS. RO reduces TDS by forcing water through a fine membrane that has microscopic pores. This process eliminates most ions and all particles, thus purifying water to the safest and purest form. Very high Hardness is best removed with a water softener; the effect of more moderate hardness is mitigated by a good polyphosphate cartridge.

Sources:

<https://www.knowyourh2o.com/indoor-6/total-dissolved-solids>
<https://www.safewater.org/fact-sheets-1/2017/1/23/tds-and-ph>