

DATA BULLETIN

TOC analysis of mineral water with the acquray TOC

The total organic carbon (TOC) content is one of the standard parameters which is routinely determined in mineral water. The acquray TOC is designed for this task and operates according to the international standard ISO 8245 on "Water quality – Guidelines for the determination of total organic carbon (TOC) and dissolved organic carbon (DOC)"

Mineral water samples, which have been produced by different manufacturers, were analyzed each six times. The mineral water bottles have been bought in a supermarket close to the Elementar headquarter.

The direct mode (determination of NPOC after removing the TIC by acidification and sparging) was used to analyze the TOC concentrations of the samples. Therefore, the samples were acidified externally with phosphoric acid in order to remove the TIC from the samples.

| ORIGIN OF THE MINERAL WATER | TOC [mg/l] | SD [mg/l] |
|-----------------------------|------------|-----------|
| East France | 0.151 | 0.015 |
| North Germany | 0.602 | 0.012 |
| Fiji | 0.140 | 0.006 |
| North East France | 0.102 | 0.017 |
| Central France | 0.269 | 0.006 |
| South Germany | 0.244 | 0.009 |
| Central Germany | 0.145 | 0.010 |

The relatively low TOC content of all mineral water samples could be determined with a very high precision.

The acquray TOC cube is a perfect instrument for the analysis of TOC in mineral water and fulfills the requirements of the international standard ISO 8245 on "Water quality – Guidelines for the determination of total organic carbon (TOC) and dissolved organic carbon (DOC)".

INSTRUMENT:

acquray TOC

DETAILS:

carrier gas: nitrogen

sample: 40 ml mineral water



STANDARD:

ISO 8245

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