

Water Analysis



Water is considered the most important foodstuff in the form of drinking water, and is used in industry as production water or cooling water. Depending on the type of water, different requirements are placed on the quality of the water. We follow the development of the legal guidelines, such as the EU Drinking Water Directive, the Drinking Water Ordinance as well as the elaborations of the VDI and DVGW intensively and can therefore react to new requirements at short notice and adapt your analysis programs as well as intervals.

As an accredited testing laboratory, we are your reliable partner in the field of water analysis...

Our customers include private households, administrations and operators of commercial real estate and businesses, operators of plants or public facilities

Examples from our **analytics portfolio** :



DRINKING WATER

Analysis of all parameters listed in the Drinking Water Ordinance Annexes 1 to 3, this includes microbiological, physical as well as chemical parameters.

- cold and warm drinking water
- well water
- flake ice

POOLE WATER

Testing of the bathing pool water according to DIN 19643. This includes microbiological, chemical and physical analysis of the samples.

INDUSTRIAL WATER

Examination of the service water according to VDI 2047-2 as well as 42. BImSchV to avoid uncontrolled immission of aerosols containing legionella

WASTE WATER

Verification of compliance with chemical and physical requirements of water regulatory permits.

- Waste water from evaporative cooling plants
- Wastewater from dry cleaners/printers
- Industrial waste water

Matrices:

Cold and hot drinking water, well water, swimming and bathing pool water incl. whirlpools, dipping buckets as well as filtrate and filling water, service water, waste water.

Institut Kirchhoff Berlin GmbH

Oudenarder Straße 16 / Carrée Seestraße
13347 Berlin-Mitte
+49 (0) 30 457 98 93-0
IKB.de@mxns.com
www.institut-kirchhoff.de

Ask us for an offer tailored to your needs.

Our services at a glance

Drinking water

Trinkwasserverordnung (TrinkwV),
DVGW W551, VDI 6023, etc.

- Hazard analysis according to VDI 6023
- Microbiological parameters
 - Legionellen nach TrinkwV
 - Screening Legionellen-PCR-Test in 24h
 - Koloniezahl 22°C / 36°C
 - *Escherichia coli*
 - Coliforme Bakterien
 - Enterokokken
 - *Pseudomonas aeruginosa*
 - *Clostridium perfringens*
- Chemical-physical parameters
 - PAHs, vinyl chloride, epichlorohydrin, total organic carbon
 - PH value, conductivity, coloration and turbidity
 - Metals like lead, copper, nickel

Bathing pool water

Analysis according to DIN 19643

- | | |
|-----------------------------------|----------------------------------|
| <i>Microbiological parameters</i> | ▪ Bromate |
| ▪ Legionella | ▪ Chlorate, chlorite |
| ▪ Colony count, 36°C | ▪ Nitrate |
| ▪ <i>Escherichia coli</i> | ▪ Oxidizability |
| ▪ <i>Pseudomonas aeruginosa</i> | ▪ Trihalomethanes |
| ▪ Chemical-physical parameters | ▪ Acid capacity |
| ▪ aluminum, arsenic, iron | ▪ free and combined chlorine |
| | ▪ pH value, redox potential |
| | ▪ clarity, coloration, turbidity |

Laboratory approvals

- Accredited inspection body, DIN EN ISO/IEC 17020
- Accredited testing laboratory, DIN EN ISO/IEC 17025

Industrial water

42nd BImSchV, VDI 2047-2, current UBA recommendation

- Hazard assessments with risk analysis and evaluation, microbiological and chemical-physical examinations
- Preparation of operating manual, information on technical data of the evaporative cooling system, cleaning and maintenance intervals
- Control of compliance with reference values for legionella and general colony count (at least every 3 months)
- Control of water quality (every 14 days)

Waste water

- Compliance with the requirements of water authority approval
- Adsorbable organic bound halogens
- Heavy metals (nickel, chromium, copper)
- Chlorine, chlorine dioxide
- Cyanide
- Special tests

Accredited sampling Determination of sampling points (site visit)

Electronic result transmission

- Interface
- Data platform

