

LIST OF LABORATORY TESTS

Drinking water sampling activity

- sampling
- site visit in Budapest
- settlements in the conurbation area supplied by Budapest Waterworks and in a 30 km radius

Drinking water testing activity

Test groups that can be ordered via online customer service:

[Laboratory services \(vizmuvek.hu\)](http://vizmuvek.hu)

OCCUPANCY PERMIT

Escherichia coli; Coliform; Enterococci; Colony count 22 °C; Colony count 37 °C; *Pseudomonas aeruginosa* Permanganate index (CODMn); total hardness; conductivity; pH, turbidity; chloride; nitrate; nitrite; ammonium; iron(Fe); manganese(Mn)

WELL TEST GROUP

Escherichia coli; Coliform; Enterococci; Colony count 22 °C; Colony count 37 °C; *Pseudomonas aeruginosa*; Spores of sulfite-reducing anaerobes (Clostridia); Permanganate index (CODMn); total hardness; conductivity; pH, nitrate; nitrite; ammonium

WELL PERMISSION TEST GROUP

Escherichia coli count; Coliform count; Colony number at 22 °; Enterococcus count; pH; turbidity; specific electrical conductivity; total hardness; chloride; ammonium; nitrite; nitrate; CODMn; alkalinity (m-total alkalinity); color; taste*; odor*; iron (Fe); manganese (Mn)

ON-SITE TESTS

Active chlorine (combined, free, total), temperature

LEGIONELLA WITH TEMPERATURE

Legionella count (temperature measurement needed)

MICROBIOLOGY (BACTERIOLOGY) GROUP

Escherichia coli; Coliform; Enterococci; Colony count 22 °C; Colony count 37 °C; *Pseudomonas aeruginosa*

CHEMISTRY GROUP

Permanganate index (CODMn); total hardness; conductivity; turbidity; pH; chloride, nitrate; nitrite; ammonium; iron(Fe); manganese(Mn)

BIOLOGY (MICROSCOPY) GROUP

Sediment; Iron and manganese bacteria; Sulphur bacteria; Contamination indicator bacteria; Cyanobacteria and algae, Fungi; Testate Amoebae (with shell); Other Protozoa, Nematodes; Other worms, Higher animals

LEAD TEST GROUP

Lead test from sample taken immediately after tap opening when water quality characterises the inner network as well.

In case of accredited sampling, sampling is done without flushing, if you do not ask otherwise.

Lead test from sample taken after minimum 5 minutes flushing.

ARSENIC TEST

Arsenic test

IRON AND MANGANESE TEST

Iron and manganese test

BATH TEST GROUP

Fecal Coliform; Pseudomonas aeruginosa; Staphylococcus aureus; Cocci Bacteria

Permanganate index (CODMn); m-alkalinity; carbonate hardness; total hardness; pH, Chloride; nitrate; nitrite; ammonium

Further laboratory testing activities:

For further tests, please contact vizelemzes@vizmuvek.hu and the laboratory will contact you!

MICROBIOLOGICAL (BACTERIOLOGICAL) TESTS***

Spore count of sulphite-reducing anaerobes (Clostridia); Clostridium perfringent count (with spores); Legionella count (temperature measurement required)

CHEMICAL TESTS

Total dissolved minerals: calcium(Ca); magnesium (Mg); sodium (Na); potassium (K); alkalinity (m-total alkalinity) ; chloride; nitrate; sulfate; bicarbonate (alkalinity (m-total alkalinity) necessary); fluoride (F)

Total dissolved minerals (in the case of mineral water): calcium(Ca); magnesium(Mg); sodium (Na); potassium (K); alkalinity (m-total alkalinity); chloride; nitrate; sulfate; bicarbonate (alkalinity (m-total alkalinity) necessary); fluoride (F); silicon (Si)

Other ions: bromide; bromate; fluoride; phosphate; sulfate; chlorite

Other elements: aluminium(Al); antimony(Sb); arsenic(As); barium(Ba); bismuth (Bi); boron (B); zinc(Zn); silver (Ag); phosphorus(P); iodine (I); mercury (Hg); cadmium(Cd); calcium(Ca); potassium (K); sulfur (S); cobalt(Co); chromium (Cr); lithium(Li); magnesium(Mg); molybdenum (Mo); sodium (Na); nickel(Ni); lead (Pb); tin (Sn); copper (Cu); strontium(Sr); selenium (Se); silicon (Si); uranium (U).

Sensory parameters: color, taste*, odor*

Other chemical tests: alkalinity (p-complex alkalinity) (pH measurement required); alkalinity (m-total alkalinity); bicarbonate alkalinity (m-total alkalinity) necessary); carbonate hardness ((alkalinity (m-total alkalinity) necessary); carbonate (alkalinity (p-complex alkalinity) necessary); cyanide; phenol index; radioactivity (total α and β radiation; radon; tritium (without enrichment)); total trihalomethane (THM: chloroform, bromoform, bromodichloromethane, dibromochloromethane); total organic carbon (TOC); dissolved organic carbon (DOC); organically bound halogens adsorbable on activated carbon (AOX); oil derivatives (EPH C10-C40); total aliphatic hydrocarbons (TPH C5-C40)*; BTEX (benzene, toluene, ethylbenzene, xylenes); PAH**; other volatile compounds**; pesticides**; evaporation residue; suspended matter*; total dissolved matter

* non-accredited test;

** special consultation required

FLEXIBLE AREAS

In the following parameter groups, the range components available for order can be flexibly expanded according to the customer's needs, **with parameters not listed here**. This and the matrix of the test substance (drinking water, groundwater, artificial bathing water, mineral water) is to be discussed separately with the Laboratory!

Elements: aluminium(Al); antimony(Sb); arsenic(As); barium(Ba); bismuth (Bi); boron (B); zinc(Zn); silver (Ag); phosphorus(P); iodine (I); mercury (Hg); cadmium(Cd); calcium(Ca); potassium (K); sulfur (S); cobalt(Co); chromium (Cr); lithium(Li); magnesium(Mg); manganese(Mn); molybdenum (Mo); sodium (Na); nickel(Ni); lead (Pb); tin (Sn); copper (Cu); strontium(Sr); selenium (Se); silicon (Si); uranium (U); iron(Fe)

Pesticides: 2,4,5-T, 2,4-D, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, acetochlorine, aldrin, alpha-endosulfan, alpha-lindane, atrazine (Actinite PK), bentazone, beta-endosulfan, beta-lindane, delta lindane, desethylatrazine, desisopropylatrazine, diazinon, dieldrin, dicamba, dimethenamid-p, endosulfan sulfate, endrin, forate, gamma-HCH (lindane), heptachlor, heptachlor epoxide, hexachlorobenzene, hexazinone, chlorpyrifos, chlorothalonil, malathion, MCPA, metazachlor, methylparathion, metolachlor (s-metolachlor), metribuzin, pendimethalin, promethrin, propachlor, propazine, propisochlor, simazine (Actinite DT), tebuconazole, terbuthylazine, terbutryn, trifluralin

Volatile aromatic hydrocarbons: benzene, xylenes (1.2-1.3-1.4), toluene, ethylbenzene

Volatile halogenated hydrocarbons: 1,2-dichloroethane, bromodichloromethane, bromoform, cis-1,2-dichloroethylene, dibromochloromethane, dichloromethane, chloroform, carbon tetrachloride, tetrachlorethylene, trichlorethylene, vinyl chloride

05 february 2024