

## PROFICIENCY TESTING SCHEME

Annual Programme 2025

# PROFICIENCY TESTING PROGRAMME 2025

## Edition 1: 24-10-2024

Interlaboratory comparison plays an important part in the adaptation, standardization and validation of measurement techniques as well as in the assessment of laboratories and the production of reference materials. Accredited laboratories also need it as proof of their technical competence.

The Environment Agency Austria (Umweltbundesamt) offers different interlaboratory comparisons every year. This allows the verification of the validity of your test results by an external quality control programme.

### The main facts of the process are:

- All interlaboratory comparisons are performed according to the requirements of EN ISO/IEC 17043. Minimum 15 participants.
- You will receive samples from us. These samples will be analysed in your laboratory.
- Your results will be submitted electronically by entering the test data online. The deadline is usually 4-5 weeks after the sample dispatch date.
- ISO 5725-2 and ISO 13528 will be used as the basis for the statistical analysis.
- The consensus value as the mean value of the results of the participants without outliers is used to evaluate real sample proficiency tests (at least n=6 valid data sets must be available). The consensus value is additionally checked for plausibility by comparing the results with a competent laboratory. If necessary, the evaluation of the real sample proficiency tests is done by the consensus value of expert laboratories (accredited participants without outliers). The expanded measurement uncertainty of the assigned value is calculated via the reproducibility standard deviation of the results of participants without outliers ( $k=2$ ).
- The so-called 'z score' will be used as assessment criterion for participant performance.
- The additional informative assessment for the participants using 'En-Scores' for proficiency testing of real water samples takes into account the expanded measurement uncertainties of the participants results and the expanded uncertainty of the assigned value.
- In case of proficiency testing of real samples control testing can from time to time be subcontracted. This is also clearly stated in the report. When subcontracting occurs, it is placed with a competent subcontractor and the proficiency testing provider is responsible for this work.
- You will receive a final report with the results of all participating laboratories in aggregated and anonymised form and a certificate of participation.

### Rules on confidentiality:

- The identity of the participants and all information transmitted by the participants to the proficiency testing provider are treated confidentially. All participants receive a randomly assigned laboratory code to anonymize all results in the report. The laboratory codes of the participants will only be made available after prior consent has been obtained via 'consent declarations', e.g. in the context of legally required participation in quality assurance programs.
- Participants taking part in the nationwide measuring program for monitoring the status of ground and surface waters in Austria (GZÜV) are informed within the framework of the GZÜV program that their laboratory code will be forwarded to the Federal Ministry of Agriculture,

Forestry, Regions and Water Management (BML) by cooperation partners IFA-Tulln and Umweltbundesamt. As all results are shown by anonymized laboratory code in the report published in internet – confidentiality can thus be guaranteed.

- In course of the accreditation procedure of the national accreditation body (Akkreditierung Austria) data may be forwarded to Accreditation Austria as required by law. It is pointed out that the experts commissioned by Accreditation Austria for the assessment within the framework of accreditation to EN ISO 17043 must treat all information received as confidential. All auditors designated for internal audits must also sign the regulation on confidentiality before carrying out the audits.

**Dealing with complaints/objections:**

- All participants have the opportunity to **report any complaints or objections by e-mail to ringversuche@umweltbundesamt.at within 14 days after receiving the confirmation of participation** (containing information on assessment, on assigned values and criteria) **and after receiving the report.** Furthermore, questions, requests or suggestions by participants can be sent to ringversuche@umweltbundesamt.at.
- All complaints and objections received by the proficiency testing provider **will be handled according to our complaints management.** In the event of a complaint or objection, the staff of the proficiency testing team will contact the participant. The facts of the case are then examined internally and the participant is informed of the investigations carried out and the measures required. Complaints or objections are processed by experts from the proficiency testing team who were not involved in the matter in question. It is ensured that the complaint or objection does not result in any disadvantage to the complainant. The participant will be informed of the end of the processing of the complaint or objection.
- In case of justified complaints or objections, **the participants will be contacted by e-mail and informed about possible editorial or technical changes** including reference to a new edition (e.g. report edition 2).

**Accredited Proficiency Testing Provider according to EN ISO/IEC 17043**

Within the cooperation between IFA-Tulln and the Umweltbundesamt since 2021 all described **proficiency tests for synthetic water samples** (IFA-Tulln: initial accreditation in May 2020) **and for real water samples** (Umweltbundesamt: initial accreditation in November 2020) are offered within the scope of accreditation.

If additional substances or parameters are included, these are initially offered outside the scope of accreditation and are marked accordingly in the programme or report.

**For any further questions please do not hesitate to contact us:**

ringversuche@umweltbundesamt.at

## HOW TO PARTICIPATE?

### Proficiency Testing Scheme for Water Analysis

Since 2013 within the cooperation between IFA-Tulln and the Umweltbundesamt we offer interlaboratory comparisons for real water samples (ground water, surface water, urban waste water and drinking water, partly spiked).

<https://www.umweltbundesamt.at/en/ic-wateranalysis>

Interlaboratory comparisons for synthetic water samples are provided by IFA-Tulln, a department of the University of Natural Resources and Life Sciences, Vienna. The Umweltbundesamt organizes all real water sample proficiency tests.

**Registration and billing of all Proficiency Tests for Water Analysis is handled by the cooperation partner IFA-Tulln:**

<https://ifatesten.boku.ac.at/>

*Shortly after ordering you will receive a confirmation of order by e-mail, containing all the relevant information (date of dispatch, approximate date of arrival of the samples). Once you have paid the participation fee for Proficiency Tests for Water Analysis, your registration will be completed and you will receive the samples as specified in our catalogue.*

### Proficiency Testing Scheme for Environmental Analysis

The Umweltbundesamt carries out Proficiency Testing Schemes yearly in a series of substances for instance waste, waste eluates, solid samples (e.g. soil) as well as air samples.

**Registration for the Proficiency Testing Scheme for Environmental Analysis by:**

<https://www.umweltbundesamt.at/en/en-prof-tests-matrices>

*Shortly after transmitting the completed registration form, you will receive a confirmation of order by e-mail ringversuche@umweltbundesamt.at, containing all the relevant information. Once you have received our confirmation email your registration will be completed and you will receive the samples as specified in our catalogue.*

**Billing of all Proficiency Testing Schemes for Environmental Analysis is performed after publishing of the report by the Umweltbundesamt (Environment Agency Austria).**

*In this catalogue you can find all details and information for proficiency tests which are offered.*

*We are obliged to charge VAT and reverse charge is applicable.*

*The prices stated are exclusive of 20 % VAT and shipment costs.*

**Here is a list of all proficiency tests, which will be offered:**

<b>Proficiency Testing Scheme for Water Analysis</b>		
<b>Programme</b>	<b>Matrices</b>	<b>Page</b>
Metals and Trace elements – M	Water	6
Nutrients/Major ions – N	Water	7
<b>NEW: Herbicides/Pesticides 001 &amp; 002 (expanded; 50 substances incl. new pesticides &amp; metabolites) – H001 &amp; H002</b>	<b>Water</b>	<b>8</b>
Pesticides in accordance with the Drinking Water Ordinance incl. optional extended scope pesticides and metabolites – advance notice 2026 – PM	Water	10
Polycyclic aromatic hydrocarbons (PAH) – P	Water	12
Pharmaceuticals, Industrial Chemicals and Artificial Sweeteners – AZ	Water	13
Sum parameters: Hydrocarbon oil index and Phenol index – SP	Water	14
BTEX and MTBE – B	Water	15
Volatile Halogenated Hydrocarbons (VHH) – C	Water	16
<b>Per- and polyfluoroalkyl substances (PFAS) – PF</b>	<b>Water</b>	<b>18</b>

<b>Proficiency Testing Scheme for Environmental Analysis</b>		
<b>Programme</b>	<b>Matrices</b>	<b>Page</b>
Waste acc to landfill directive (total contents) – AB	Waste	19
Waste acc. to landfill directive (eluate metals) – advance notice 2026 – AB	Waste (eluate)	20
Waste acc. to landfill directive (eluate ions) – advance notice 2026 – AB	Waste (eluate)	21
Chlorinated hydrocarbons (CHC) – CL	Ambient Air	22
BTEX & C5–C10 – BL	Ambient Air	23
Chlorinated hydrocarbons (CHC) and BTEX & C5–C10 – CBL	Ambient Air	24
Per- and polyfluoroalkyl substances – advance notice 2026 – PFS	Solid sample	25
<b>NEW: Per- and polyfluoroalkyl substances (eluate preparation &amp; analysis) – PFL</b>	<b>Solid sample for eluate preparation</b>	<b>26</b>

<b>Annex</b>		
Minimum concentrations and performance criterion	Water	27

**For further information please have a look at our website**

<https://www.umweltbundesamt.at/en/proficiency-testing>

# PROFICIENCY TESTING SCHEME FOR WATER ANALYSIS

Description of Programme	
No M175	Metals and trace elements
List of substances:	Al, As, Pb, Cd, Cr, Fe, Cu, Mn, Ni, Hg, Se, U, Zn
Matrix:	Natural water
Samples:	2; 1 ground water sample, 1 surface water sample (partly fortified)
Sample dispatch:	04 February 2025
Closing date:	04 March 2025
Cost:	EUR 545,-

Technical Information					
Parameter to analyse	Bottle/sample			Stabilisation	Refrigeration
	Volume	Number	Type		
<i>see minimum concentrations and performance criteria in the annex (page 27)</i>	250 ml and	1 and	plastic container	yes, with HNO <sub>3</sub>	yes
	100 ml (Hg)	1		yes, with HCl (Hg)	

## Recommended period to start the sample treatment:

D<sub>0</sub> + 8

*Do ... Day the samples are sent to all participants.*

Additional proficiency tests (synthetic samples) performed by partner IFA-Tulln (registration <https://ifatesten.boku.ac.at/>) Cost: EUR 545,-; **M177 and M179** with additional substances EUR 565,-.

		Sample dispatch	Closing date
<b>No M176</b>	Metals and trace elements	03 March 2025	28 March 2025
<b>No M177</b>	Metals and trace elements (additionally E1: Ag, Ce, Co, Li, V, Be und Gd)  Note: For round <b>M177</b> (3 <sup>rd</sup> round 2025, metals – synthetic samples), in addition to the normal scope Silver, Cerium, Cobalt, Lithium, Vanadium, Beryllium and Gadolinium are added.	12 May 2025	06 June 2025
<b>No M178</b>	Metals and trace elements	08 September 2025	03 October 2025
<b>No M179</b>	Metals and trace elements (additionally E2: Ba, Sb, Sn, Mo, Sr, <b>no Hg!</b>  Note: For round <b>M179</b> (5 <sup>th</sup> round 2025, metals – synthetic samples), in addition to the normal scope excluding mercury, the parameters Barium, Antimony, Tin, Molybdenum and Strontium are observed.	10 November 2025	05 December 2025

<b>Description of Programme</b>	
<b>No N175</b>	<b>Nutrients/Major ions</b>
List of substances:	Total hardness, alkalinity K <sub>S</sub> 4.3, electrical conductivity (25°C), HCO <sub>3</sub> <sup>-</sup> , Ca <sup>2+</sup> , Mg <sup>2+</sup> , Na <sup>+</sup> , K <sup>+</sup> , NO <sub>3</sub> <sup>-</sup> , NO <sub>2</sub> <sup>-</sup> , NH <sub>4</sub> <sup>+</sup> , Cl <sup>-</sup> , SO <sub>4</sub> <sup>2-</sup> , o-PO <sub>4</sub> <sup>3-</sup> , B, DOC, total-P (dissolved, as PO <sub>4</sub> <sup>3-</sup> ); <b>pH, total-N (N175 only)</b>
Matrix:	Natural water
Samples:	2; 1 ground water sample, 1 surface water sample (partly fortified)
Sample dispatch:	04 February 2025
Closing date:	04 March 2025
Cost:	EUR 545,-

<b>Technical Information</b>					
<b>Parameter to analyse</b>	<b>Bottle/sample</b>			<b>Stabilisation</b>	<b>Refrigeration</b>
	<b>Volume</b>	<b>Number</b>	<b>Type</b>		
<i>see minimum concentrations and performance criteria in the annex (page 27)</i>	500 ml and	2 and	Plastic container	no	yes
	250 ml (DOC)	1		yes, with HCl (DOC)	

**Recommended period to start the sample treatment:**

For DOC, NO<sub>2</sub><sup>-</sup>, NH<sub>4</sub><sup>+</sup>, o-PO<sub>4</sub><sup>3-</sup> and pH we recommend analysis  
as soon as possible after receipt of the samples.

D<sub>0</sub> + 8

D<sub>0</sub> ... Day the samples are sent to all participants.

Additional proficiency tests (synthetic samples) performed by our partner IFA-Tulln  
(registration <https://ifatesten.boku.ac.at/>). Cost: EUR 545,-.

		<b>Sample dispatch</b>	<b>Closing date</b>
<b>No N176</b>	Nutrients/major ions (additionally total-Si (dissolved) and fluoride)	03 March 2025	28 March 2025
<b>No N177</b>	Nutrients/major ions (additionally KMnO <sub>4</sub> -index (as O <sub>2</sub> ) acc. to EN ISO 8467 (H5))	12 May 2025	06 June 2025
<b>No N178</b>	Nutrients/major ions (additionally easily liberatable cyanide acc. to DIN 38405-D13 (ISO 14403-2; ISO 6703- 2), total-Si (dissolved) and fluoride)	08 September 2025	03 October 2025
<b>No N179</b>	Nutrients/major ions (additionally KMnO <sub>4</sub> -index (as O <sub>2</sub> ) acc. to EN ISO 8467 (H5))	10 November 2025	05 December 2025

<b>Description of Programme</b>	
<b>No H001</b>	<b>NEW: Herbicides/Pesticides (expanded scope, 50 substances)</b>
List of substances:	2,4,5-Trichlorophenoxyacetic acid, 2,4-D, 2,6-Dichlorobenzamide, Alachlor, Alachlor-ESA, Alachlor-OA, Aminomethylphosphonic acid (AMPA), Atrazine, Atrazine-desethyl, Atrazine-desethyl-desisopropyl, Atrazine-desisopropyl, Bentazone, Chlорidazon-desphenyl, Chlorothalonil Metabolites: R417888*, R471811*, R611965*, R611968*, SYN507900*, SYN548580*, SYN548581*; Chlorothalonil-4-hydroxy*, Clopyralid, Cyanazine, Dicamba, 2,4-DP (Dichlor-prop), Dimethachlor Metabolites: Dimethachlor oxalamic acid (CGA 50266)*, Dimethachlor ethane sulfonic acid (CGA 354742)*, CGA 369873*, CGA 373464 (free acid)* - CAS-No. 1196157-87-5 Synonym: [(2,6-Dimethylphenyl)(2-sulfoacetyl)amino]acetic acid sodium salt, CGA 373464 (acetic acid methyl ester)* - IUPAC: [(2,6-dimethyl-phenyl)-methoxycarbonylmethyl-carbamoyl]-methanesulfonic acid sodium salt; Glufosinate, Glyphosate, Metazachlor, Metolachlor, S-Metolachlor Metabolites: CGA 368208*, NOA 413173*; Metribuzin*, Glufosinate metabolite MPPA*; Nicosulfuron, Prometryn, Propazine, Sebutylazine, Simazine, Terbutylazine, Terbutylazine-desethyl, Terbutylazin Metabolites: SYN 546009 (LM3)*, CGA 324007 (LM5)*, SYN 545666 (LM6)*; Terbutryn, Tritosulfuron*
	* additional substances, not accredited
Matrix:	Natural water
Samples:	2; 1 ground water, 1 surface water
Sample dispatch:	25 March 2025
Closing date:	29 April 2025
Cost:	EUR 750,- (introductory price)

<b>Technical Information</b>					
<b>Parameter to analyse</b>	<b>Bottle/sample</b>			<b>Stabilisation</b>	<b>Refrige- ration</b>
	<b>Volume</b>	<b>Number</b>	<b>Type</b>		
see minimum concentrations and performance criteria in the annex (page 28)	300 ml or	2 or	Aluminium container and	no	yes
	1000 ml or	2 or			
	1000 ml and	4 and			
	1000 ml	1	plastic container (AMPA, Glufosinate, Glyphosate, MPPA)		

\* additional substances, not accredited.

#### **Recommended period to start the sample treatment:**

D<sub>0</sub> + 8

D<sub>0</sub> ... Day the samples are sent to all participants.

<b>Description of Programme</b>	
<b>No H002</b>	<b>NEW: Herbicides/Pesticides (expanded scope, 50 substances)</b>
List of substances:	2,6-Dichlorobenzamide, 3,5,6-Trichloro-2-pyridinol*, Acetamiprid, Alachlor, Aldrin, Atrazine, Atrazine-desethyl, Atrazine-desethyl-desisopropyl, Atrazine-desisopropyl, Bromacil, Sum Chlordane, Chlordazon, Chlordazon-desphenyl, Chlordazon-methyl-desphenyl, Clothianidin, Cyanazine, Sum DDD, Sum DDE, Sum DDT, Dieldrin, Dimethachlor*, Dimethenamid (Dimethenamid-P), Dinotefurane, Diuron, Sum Endosulfan, Endrin, Heptachlor, Hexazinone*, Imidacloprid, Lindane, Mecoprop (MCPP), Metazachlor oxanilic acid (Metazachlor-OA), Metazachlor ethane sulfonic acid (Metazachlor-ESA), Metolachlor, Metolachlor oxanilic acid (Metolachlor-OA), Metolachlor ethane sulfonic acid (Metolachlor-ESA), Metribuzin-Desamino*, N,N-Dimethylsulfamide (DMS), Nitropyram, Prometryn, Propazine, Quinmerac*, Sebutylazine, Simazine, Terbutylazine, Terbutylazine-2-Hydroxy*, Terbutylazine-desethyl, Terbutryl, Thiacloprid, Thiamethoxam <i>* additional substances, not accredited</i>
Matrix:	Natural water
Samples:	2; 1 ground water, 1 surface water
Sample dispatch:	07 October 2025
Closing date:	11 November 2025
Cost:	EUR 750,- (introductory price)

<b>Technical Information</b>					
<b>Parameter to analyse</b>	<b>Bottle/sample</b>			<b>Stabilisation</b>	<b>Refrigeration</b>
	<b>Volume</b>	<b>Number</b>	<b>Type</b>		
<i>see minimum concentrations and performance criteria in the annex (pages 29)</i>	300 ml or	2 or	Aluminium container	no	yes
	1000 ml or	2 or			
	1000 ml	4			

**Recommended period to start the sample treatment:** D<sub>0</sub> + 8

*Do ... Day the samples are sent to all participants.*

<b>Description of Programme</b>	
<b>Advance notice 2026:</b> <b>No PM06</b>	<b>Pesticides in accordance with the Drinking Water Ordinance</b> incl. relevant and non-relevant metabolites
<b>and option PM06-E</b>	<b>Optional: extended scope pesticides and metabolites</b>
List of substances:	<p><b>Pesticides:</b> 2,4-D (2,4-Dichlorophenoxyaceticacid), 2,4-DP (Dichlorprop), Alachlor, Aldrin, Atrazine, Azoxystrobin, Bentazone, Bromacil, Chlорidazon, Clopyralid, Clothianidin, Dicamba, Dieldrin, Dimethachlor, Dimethenamid-P, Diuron, Ethofumesate, Flufenacet, Glufosinate, Glyphosate, Heptachlor, Heptachlorepoxyde, Hexazinone, Imidacloprid, Iodosulfuron-methyl, Isoproturon, MCPA, MCPB, MCPP (Mecoprop), Mesosulfuron-methyl, Metalexyl-M, Metamitron, Metazachlor, Metolachlor, Metribuzin, Nicosulfuron, Pethoxamid, Propazine, Propiconazole, Simazine, Terbutylazine, Thiaclorpid, Thiamethoxam, Thifensulfuron-methyl, Tolyfluanid, Tribenuron-methyl, Triclopyr, Triflusulfuronmethyl, Tritosulfuron</p> <p><b>Relevant metabolites:</b> 2-Amino-4-methoxy-6-methyl-1,3,5-triazine, 3,5,6-Trichloro-2-pyridinol, 6-Chloro-1,3,5-Triazine-2,4-Diamine (Atrazine-desethyl-desisopropyl), Atrazine-desethyl, Atrazine-desisopropyl, Dimethachlor Metabolite CGA 369873, Dimethachlor Metabolite CGA 373464 (acetic acid methyl ester) - IUPAC: [(2,6-dimethyl-phenyl)-methoxycarbonylmethyl-carbamoyl]-methanesulfonic acid sodium salt; Dimethachlor Metabolite CGA 373464 (free acid) - CAS-No. 1196157-87-5 Synonym: [(2,6-Dimethylphenyl)(2-sulfoacetyl)amino]acetic acid sodium salt; Dimethachlor oxalamic acid (CGA 50266, Dimethachlor-OA), Dimethachlor ethane sulfonic acid (CGA 354742, Dimethachlor-ESA), Isoproturon-desmethyl, Propazine-2-hydroxy, Terbutylazine-2-hydroxy, Terbutylazine-2-hydroxy-desethyl, Terbutylazine-desethyl</p> <p><b>Non-relevant metabolites:</b> 2,6-Dichlorobenzamide, Alachlor-t-acid (Alachlor-OA), Alachlor-t-sulfonic acid (Alachlor-ESA), Aminomethyl-phosphonic acid (AMPA), Atrazine-2-hydroxy, Azoxystrobin-O-demethyl (CyPM), Chlорidazon-desphenyl, Chlорidazon-methyl-desphenyl, Chlorothalonil-sulphonic acid (R417888), 3-carbamyl-2,4,5-trichlorobenzoic acid (R611965), *Chlorothalonil metabolite R471811, Dimethenamid-P-acid (Dimethenamid-OA), Dimethenamid-P-sulfonic acid (Dimethenamid-ESA), Flufenacet oxanilic acid (Flufenacet-OA), Flufenacet sulfonic acid (Flufenacet-ESA), Metazachlor oxanilic acid (Metazachlor-OA), Metazachlor ethane sulfonic acid (Metazachlor-ESA), Metribuzin-Desamino, N,N-Dimethylsulfamide (DMS), s-Metolachlor Metabolite CGA 368208, s-Metolachlor Metabolite NOA 413173, s-Metolachlor oxanilic acid (Metolachlor-OA), s-Metolachlor ethanesulfonic acid (Metolachlor-ESA)</p> <p><b>PM06-E: Optional extended scope pesticides and metabolites:</b>            *Etidimuron, *Quinmerac, *Bromoxynil, *Flazasulfuron , *Chlorothalonil metabolite SYN 507900, *Nicosulfuron metabolite UCSN, *Terbutylazine metabolite SYN 546009 (LM3), *Terbutylazine metabolite CGA 324007 (LM5), *Terbutylazine metabolite SYN 545666 (LM6), *Desaminometamitron, *Metazachlor metabolite BH 479-9  <i>* additional substances, not accredited</i></p>
Matrix:	Water
Samples:	2; drinking water (spiked)
Sample dispatch:	Note: The next round for Pesticides in accordance with the Drinking Water Ordinance in real water samples will take place in 2026.
Closing date:	5 weeks after sample dispatch
Cost:	EUR 990,-
<b>Optional: additional EUR 145,- (PM06-E extended scope)</b>	

Technical Information							
Parameter to analyse	Bottle/sample			Stabilisation	Refrige- ration		
	Volume	Number	Type				
All mentioned groups of substances at page 10:	1000 ml	2 or	Aluminium container and	no	yes		
<b>Pesticides</b>		4 and					
<b>Relevant metabolites</b>		1 or	plastic container (AMPA, Glyphosate, Glufosinate)				
<b>Non-relevant metabolites</b>		2					
<b>Optional: PM06-E extended scope for pesticides and metabolites</b> <i>see minimum concentrations and performance criteria in the annex (pages 31–34)</i>							

The proficiency test covers pesticides, relevant and non-relevant metabolites of the drinking water ordinance and is taking into account Codex chapter B1/drinking water.

**Supplements to codex B1** are published by the Federal Ministry of Social Affairs, Health, Care and Consumer Protection based on the resolution of the commission to issue the Austrian Food Code (see BMG 2022-0.428.569 of 28.06.2022).

[https://www.verbrauchergesundheit.gv.at/lebensmittel/buch/codex/beschluesse/Aktion-sweite\\_Trinkwasser\\_Metaboliten.pdf](https://www.verbrauchergesundheit.gv.at/lebensmittel/buch/codex/beschluesse/Aktion-sweite_Trinkwasser_Metaboliten.pdf)

**Pesticides and metabolites** as stipulated in the drinking water ordinance are listed in tabular form in **Codex Chapter B1/drinking water, Annex 9** of the Austrian Food Code.

[https://www.verbrauchergesundheit.gv.at/lebensmittel/buch/codex/B\\_01\\_Trinkwasser](https://www.verbrauchergesundheit.gv.at/lebensmittel/buch/codex/B_01_Trinkwasser)

Note: Each pesticide/metabolite is present in at least one sample (concentration: range 1/4 up to 10-fold of parameter value/ action value for metabolites acc. to codex chapter B1/drinking water, Annex 9 of the Austrian Food Code).

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#### Recommended period to start the sample treatment:

D<sub>0</sub> + 8

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*Do ... Day the samples are sent to all participants.*

This proficiency test is offered every two years.

#### PM06-E: extended scope pesticides and metabolites:

By request of our customers, there is the option to order the extended scope for pesticides and metabolites in addition to PM06 (not accredited scope).

Please note that all results of the participating laboratories will be evaluated and presented in the report in anonymous form. However, if less than six measurement results are submitted for a parameter, the statistical evaluation is only possible to a limited extent. When only a few laboratories submit values for new parameters, no assigned value can be defined. In this case, we recommend comparing your results with the results of the control laboratory and the valid results provided by the participating laboratories.

<b>Description of Programme</b>	
<b>No P26</b>	<b>Polycyclic aromatic hydrocarbons (PAH)</b>
List of substances:	Naphthalene, Acenaphthene, Acenaphthylene, Fluorene, Anthracene, Phenanthrene, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Dibenzo(ah)anthracene, Benzo(ghi)perylene, Indeno(1,2,3-cd)pyrene
Matrix:	Natural water
Samples:	2; 1 drinking water (spiked), 1 ground water
Sample dispatch:	18 February 2025
Closing date:	18 March 2025
Cost:	EUR 605,-

<b>Technical Information</b>					
<b>Parameter to analyse</b>	<b>Bottle/sample</b>			<b>Stabilisation</b>	<b>Refrigeration</b>
	<b>Volume</b>	<b>Number</b>	<b>Type</b>		
<i>see minimum concentrations and performance criteria in the annex (page 34)</i>	1000 ml	2	brown glass	no	yes

**Recommended period to start the sample treatment:** D<sub>0</sub> + 2

D<sub>0</sub> ... Day the samples are sent to all participants.

<b>Description of Programme</b>	
<b>No AZ12</b>	<b>Pharmaceuticals, industrial chemicals and artificial sweeteners</b>
List of substances:	4-Acetylaminooantipyrine, Amidotrizoic acid, Atenolol, Bisoprolol, Carbamazepine, Diazepam, Diclofenac, 10,11-Dihydro-10,11-Dihydroxycarbamazepine, 4-Formylaminooantipyrine, Ibuprofen, Iopamidol, Metoprolol, Sotalol, Sulfamethoxazole, Benzotriazole, Acesulfame, Cyclamate, Saccharin, Sucralose
Matrix:	Natural water
Samples:	2; 1 municipal waste water, 1 surface water
Sample dispatch:	11 March 2025
Closing date:	08 April 2025
Cost:	EUR 595,-

<b>Technical Information</b>					
<b>Parameter to analyse</b>	<b>Bottle/sample</b>			<b>Stabilisation</b>	<b>Refrigeration</b>
	<b>Volume</b>	<b>Number</b>	<b>Type</b>		
<i>see minimum concentrations and performance criteria in the annex (page 34)</i>	1000 ml	2	Aluminium container	yes (approx. 10 mg Sodium azide)	yes

**Recommended period to start the sample treatment:**D<sub>0</sub> + 8

*Do ... Day the samples are sent to all participants.*

<b>Description of Programme</b>	
<b>No SP10</b>	<b>Sum parameters</b>
List of sum parameters:	Hydrocarbon oil index and phenol index Optional: only hydrocarbon oil index possible
Matrix:	Natural water
Samples:	2; 1 drinking water (spiked), 1 ground water
Sample dispatch:	13 May 2025
Closing date:	10 June 2025
Cost:	EUR 565,- (for hydrocarbon oil index and phenol index) EUR 345,- (for hydrocarbon oil index only)

<b>Technical Information</b>					
<b>Parameter to analyse</b>	<b>Bottle/sample</b>			<b>Stabilisation</b>	<b>Refrige- ration</b>
	<b>Volume</b>	<b>Number</b>	<b>Type</b>		
Hydrocarbon oil index	1000 ml	2	Glass	no	yes
Phenol index	1000 ml	2	Glass	yes, pH < 4 with H <sub>3</sub> PO <sub>4</sub> and CuSO <sub>4</sub> x 5 H <sub>2</sub> O 1 g/l	yes
<i>see minimum concentrations and performance criteria in the annex (page 35)</i>					

**Recommended period to start the sample treatment:**D<sub>0</sub> + 2*Do ... Day the samples are sent to all participants.*

For **SP10**, you can choose proficiency test for hydrocarbon oil index **and** phenol index or hydrocarbon oil index only. The selection of phenol index only is not possible. The evaluation data of both sum parameters are presented in a joint report.

<b>Description of Programme</b>	
<b>No B14</b>	<b>BTEX/MTBE</b>
List of substances:	BTEX: Benzene, Toluene, Ethylbenzene, o-Xylene, sum of m-Xylene and p-Xylene; Methyl-tertiary-butylether (MTBE)
Matrix:	Natural water
Samples:	2; 1 surface water, 1 ground water (partly fortified)
Sample dispatch:	22. April 2025
Closing date:	20. Mai 2025
Cost:	EUR 560,-

<b>Technical Information</b>					
<b>Parameter to analyse</b>	<b>Bottle/sample</b>			<b>Stabilisation</b>	<b>Refrige- ration</b>
	<b>Volume</b>	<b>Number</b>	<b>Type</b>		
<i>see minimum concentrations and performance criteria in the annex (page 36)</i>	600 ml	1	Aluminium container	no	yes

**Recommended period to start the sample treatment:** D<sub>0</sub> + 8

*D<sub>0</sub> ... Day the samples are sent to all participants.*

**The proficiency tests VHH and BTEX&MTBE in real water samples will be offered in an alternating mode. A proficiency test for VHH for real water samples will take place in 2026.**

Additional proficiency tests (synthetic samples) performed by the cooperation partner IFA-Tulln (registration <https://ifatesten.boku.ac.at/>). The single price for BTEX/MTBE is EUR 560,- or EUR 600,- for VHH. The price for VHH and BTEX/MTBE is EUR 1060,-.

		<b>Sample dispatch</b>	<b>Closing date</b>
<b>No B-CB12</b>	<b>BTEX/MTBE</b>		
	BTEX: Benzene, Toluene, Ethylbenzene, o-Xylene, sum of m-Xylene and p-Xylene; Methyl tertiary-butyl ether (MTBE)	20 October 2025	14 November 2025

In round **CB12** the extent of participation is selectable (BTEX/MTBE, VHH or both). Evaluation of the round will be carried out in a joint report.

<b>Description of Programme</b>	
<b>Advance notice 2026:</b>	<b>Volatile Halogenated Hydrocarbons (VHH)</b>
No C75	
List of substances:	VHH: Bromodichloromethane, Dibromochloromethane, 1,2-Dichloroethane, 1,1-Dichloroethene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, Dichloromethane, Tetrachloroethene, Tetrachloromethane, Tribromomethane, 1,1,1-Trichloroethane, Trichloroethene, Trichloromethane
Matrix:	Natural water
Samples:	2; 1 surface water, 1 ground water (partly fortified)
Sample dispatch:	Note: The next round for VHH in real water samples will take place in 2026.
Closing date:	4 weeks after sample dispatch
Cost:	EUR 600,-

<b>Technical Information</b>					
<b>Parameter to analyse</b>	<b>Bottle/sample</b>			<b>Stabilisation</b>	<b>Refrigeration</b>
	<b>Volume</b>	<b>Number</b>	<b>Type</b>		
<i>see minimum concentrations and performance criteria in the annex (page 35)</i>	600 ml	1	Aluminium container	no	yes

**Recommended period to start the sample treatment:** D<sub>0</sub> + 8

*Do ... Day the samples are sent to all participants.*

Additional proficiency tests (synthetic samples) will be performed by the cooperation partner IFA-Tulln (registration <https://ifatesten.boku.ac.at/>). The single price is EUR 600,- for VHH or EUR 560,- for BTEX/MTBE. The price for VHH and BTEX/MTBE is EUR 1060,-.

		Sample dispatch	Closing date
No C72	<b>Volatile halogenated hydrocarbons (VHH)</b>  VHH: Bromodichloromethane, Dibromochloromethane, 1,2-Dichloroethane, 1,1-Dichloroethene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, Dichloromethane, Tetrachloroethene, Tetrachloromethane, Tribromomethane, 1,1,1-Trichloroethane, Trichloroethene, Trichloromethane	24 February 2025	21 March 2025
No C73	<b>Volatile halogenated hydrocarbons (VHH)</b>  VHH: Bromodichloromethane, Dibromochloromethane, 1,2-Dichloroethane, 1,1-Dichloroethene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, Dichloromethane, Tetrachloroethene, Tetrachloromethane, Tribromomethane, 1,1,1-Trichloroethane, Trichloroethene, Trichloromethane	02 June 2025	27 June 2025
No CB12	<b>Volatile halogenated hydrocarbons (VHH)</b>  VHH: Bromodichloromethane, Dibromochloromethane, 1,2-Dichloroethane, 1,1-Dichloroethene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, Dichloromethane, Tetrachloroethene, Tetrachloromethane, Tribromomethane, 1,1,1-Trichloroethane, Trichloroethene, Trichloromethane	20 October 2025	14 November 2025
No CB12	<b>BTEX/MTBE</b>  BTEX: Benzene, Toluene, Ethylbenzene, o-Xylene, sum of m-Xylene and p-Xylene; Methyl tertiary-butyl ether (MTBE)	20 October 2025	14 November 2025

In round **CB12** the extent of participation is selectable (VHH, BTEX/MTBE or both). Evaluation of the round will be carried out in a joint report.

<b>Description of Programme</b>	
<b>No PF04</b>	<b>Per- and polyfluoroalkyl substances *(PFAS)</b>
List of substances:	*Perfluorobutanoic acid (PFBA) – PF4C; *Perfluoropentanoic acid (PFPeA) – PF5C; *Perfluorohexanoic acid (PFHxA) – PF6C; *Perfluoroheptanoic acid (PFHpA) – PF7C; *Perfluoroctanoic acid (PFOA) – PF8C; *Perfluorononanoic acid (PFNA) – PF9C; *Perfluorodecanoic acid (PFDA) – PF10C; *Perfluoroundecanoic acid (PFUnDA) – PF11C; *Perfluorododecanoic acid (PFDoDA) – PF12C; *Perfluorotridecanoic acid (PFTrDA) – PF13C; *Perfluorotetradecanoic acid (PFTeDA) – PF14C; *Perfluorobutane sulfonic acid (PFBS) – PF4S; *Perfluoropentane sulfonic acid (PFPeS) – PF5S; *Perfluorohexane sulfonic acid (PFHxS) – PF6S; *Perfluoroheptane sulfonic acid (PFHpS) – PF7S; *Perfluoroctane sulfonic acid (PFOS) – PF8S; *Perfluorononane sulfonic acid (PFNS) – PF9S; *Perfluorodecane sulfonic acid (PFDS) – PF10S; *Perfluoroundecane sulfonic acid (PFUnDS) – PF11S; *Perfluorododecane sulfonic acid (PFDoS) – PF12S; *Perfluorotridecane sulfonic acid (PFTrDS) – PF13S; *N-Ethyl-perfluoroctane sulfonamidoacetic acid (N-EtFOSAA); *4:2 Fluorotelomer sulfonate (4:2 FTS); *6:2 Fluorotelomer sulfonate (6:2 FTS); *8:2 Fluorotelomer sulfonate (8:2 FTS); *Perfluoro-4,8-dioxa-3H-nonanoic acid (DONA); *2,3,3-Tetrafluoro-2-(heptafluoropropoxy)propanoic acid (GenX); *9-Chlorohexadecafluoro-3-oxanone sulfonic acid (main component F-53B); since 2023: *Perfluorohexane sulfonic acid (PFHxS) as sum of branched PFHxS (br-PFHxS) plus the linear isomer (n-PFHxS) (Total PFHxS); *linear Perfluorohexane sulfonic acid (n-PFHxS); *branched Perfluorohexane sulfonic acid isomers (br-PFHxS (sum)); *Perfluoroctane sulfonic acid (PFOS) as sum of branched PFOS (br-PFOS) plus the linear isomer (n-PFOS) (Total PFOS); *linear Perfluoroctane sulfonic acid (n-PFOS); *branched Perfluoroctane sulfonic acid isomers PFOS (br-PFOS (sum)) * not accredited
Matrix:	Natural water
Samples:	2; 1 drinking water, 1 ground water (partly fortified)
Sample dispatch:	04 November 2025
Closing date:	02 December 2025
Cost:	EUR 780,-

<b>Technical Information</b>					
<b>Parameter to analyse</b>	<b>Bottle/sample</b>			<b>Stabilisation</b>	<b>Refrigeration</b>
	<b>Volume</b>	<b>Number</b>	<b>Type</b>		
see minimum concentrations and performance criteria in the annex (page 36)	1000 ml	1	HDPE	no	yes

<b>Recommended period to start the sample treatment:</b>	D <sub>0</sub> + 8
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*Do ... Day the samples are sent to all participants.*

**The proficiency test for PFAS in real water samples (drinking water and ground water) is offered since 2022 (\*not accredited according to EN ISO/IEC 17043).**

**Registration and ordering** of PF04 is possible via <https://ifatesten.boku.ac.at/>.

# PROFICIENCY TESTING SCHEME ENVIRONMENTAL ANALYSIS

Description of Programme	
No AB16	Waste acc. to landfill directive (Austria) (total contents)
List of substances:	Total content in solid sample: Sb, As, Ba, Pb, Cd, Cr, Co, Cu, Mo, Ni, Hg, Se, Ag, V, Zn, Sn, TOC, hydrocarbon oil index, PAH (sum of 16 polycyclic aromatic hydrocarbons acc. to EPA), Benzo(a)pyrene, dry mass, loss of ignition (550°C); optional: TOC according to ÖNORM L1080
Matrix:	Waste
Samples:	1 homogenized solid sample
Sample dispatch:	16 September 2025
Closing date:	14 October 2025
Cost excl. VAT:	EUR 605,- and additional EUR 89,- for additional option TOC_ON L1080

Technical Information					
Parameter to analyse	Vessel/sample			Stabilisation	Refrige- ration
	Volume	Number	Type		
Total content in solid sample: Sb, As, Ba, Pb, Cd, Cr, Co, Cu, Mo, Ni, Hg, Se, Ag, V, Zn, Sn, TOC, hydrocarbon oil index, sum of PAHs (EPA), Benzo(a)pyrene; dry mass, loss of ignition (550°C); optional: TOC_ON L1080	approx. 0.3 kg	1	plastic container	no	no

**Recommended period to start the sample treatment:**

D<sub>0</sub> + 8

*Do ... Day the samples are sent to all participants.*

<b>Description of Programme</b>	
<b>Advance notice 2026:</b>	<b>Waste acc. to landfill directive (Austria) (eluate metals only)</b>
<b>No AB17</b>	
List of substances:	In eluate: Al, Sb, As, Ba, Pb, B, Cd, Cr, Co, Fe, Cu, Mo, Ni, Hg, Se, Ag, V, Zn, Sn
Matrix:	Waste
Samples:	1 eluate sample
Sample dispatch:	Note: The next round for total eluate metals sample will be organized in 2026
Closing date:	4 weeks after sample dispatch
Cost excl. VAT:	EUR 630,-

<b>Technical Information</b>					
<b>Parameter to analyse</b>	<b>Bottle/sample</b>			<b>Stabilisation</b>	<b>Refrige- ration</b>
	<b>Volume</b>	<b>Number</b>	<b>Type</b>		
In eluate: Al, Sb, As, Ba, Pb, B, Cd, Cr, Co, Fe, Cu, Mo, Ni, Hg, Se, Ag, V, Zn, Sn	100 ml and	1 and	plastic container	yes, with HNO <sub>3</sub> and	yes
	100 ml	1		yes, with HCl (Hg)	

**Recommended period to start the sample treatment:** D<sub>0</sub> + 8

*D<sub>0</sub> ... Day the samples are sent to all participants.*

<b>Description of Programme</b>	
<b>Advance notice 2026:</b>	<b>Waste acc. to landfill directive (Austria) (eluate ions only)</b>
<b>No AB18</b>	
List of substances:	In eluate: pH, electrical conductivity, evaporation residue, NH <sub>4</sub> <sup>+</sup> (as N), Cl <sup>-</sup> , F <sup>-</sup> , NO <sub>3</sub> <sup>-</sup> (as N), NO <sub>2</sub> <sup>-</sup> (as N), PO <sub>4</sub> <sup>3-</sup> (as P), SO <sub>4</sub> <sup>2-</sup> , TOC (as C)
Matrix:	Waste
Samples:	1 eluate sample
Sample dispatch:	Note: The next round for total eluate ions sample will be organized in 2026
Closing date:	4 weeks after sample dispatch
Cost excl. VAT:	EUR 630,-

<b>Technical Information</b>					
<b>Parameter to analyse</b>	<b>Bottle/sample</b>			<b>Stabilisation</b>	<b>Refrige- ration</b>
	<b>Volume</b>	<b>Number</b>	<b>Type</b>		
In eluate: pH, electrical conductivity, evaporation residue, NH <sub>4</sub> (as N), Cl, F, NO <sub>3</sub> (as N), NO <sub>2</sub> (as N), PO <sub>4</sub> (as P), SO <sub>4</sub> , TOC (as C)	500 ml and	1 and	plastic container	no and	yes
	100 ml	1		yes, with HCl (TOC)	

**Recommended period to start the sample treatment:**D<sub>0</sub> + 8

*D<sub>0</sub> ... Day the samples are sent to all participants.*

<b>Description of Programme</b>	
<b>No CL12</b>	<b>Chlorinated hydrocarbons (CHC)</b>
List of substances:	Trichloromethane, 1,1,1-Trichloroethane, Trichloroethene, Tetrachloro-methane, Tetrachloroethene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene
Matrix:	Ambient air
Samples:	1 (+ 1 unloaded tube)
Sample dispatch:	23 September 2025
Closing date:	21 October 2025
Cost excl. VAT:	EUR 605,-

<b>Technical Information</b>					
<b>Parameter to analyse</b>	<b>Tube/sample</b>			<b>Stabilisation</b>	<b>Refrige- ration</b>
	<b>Volume</b>	<b>Number</b>	<b>Type</b>		
Trichloromethane, 1,1,1-Trichloroethane, Trichloroethene, Tetrachloromethane, Tetrachloroethene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene	-	1 (and 1 unloaded tube)	activated charcoal tube (Orbo 32 S, Supelco)	no	no

**Recommended period to start the sample treatment:**D<sub>0</sub> + 8

*Do ... Day the samples are sent to all participants.*

<b>Description of Programme</b>	
<b>No BL13</b>	<b>BTEX &amp; C5-C10</b>
List of substances:	<b>BTEX:</b> Benzene, Toluene, Ethylbenzene, sum of m-Xylene and p-Xylene, o-Xylene; <b>C5-C10:</b> n-Pentane, n-Hexane, n-Heptane, n-Octane, n-Nonane, n-Decane
Matrix:	Ambient air
Samples:	1 (+ 1 unloaded tube)
Sample dispatch:	23 September 2025
Closing date:	21 October 2025
Cost excl. VAT:	EUR 605,-

<b>Technical Information</b>					
<b>Parameter to analyse</b>	<b>Tube/sample</b>			<b>Stabilisation</b>	<b>Refrige- ration</b>
	<b>Volume</b>	<b>Number</b>	<b>Type</b>		
BTEX: Benzene, Toluene, Ethylbenzene, sum of m-Xylene and p-Xylene, o-Xylene; C5-C10: n-Pentane, n-Hexane, n-Heptane, n-Octane, n-Nonane, n-Decane	-	1 (and 1 unloaded tube)	activated charcoal tube (Orbo 32 S, Supelco)	no	no

**Recommended period to start the sample treatment:** D<sub>0</sub> + 8

*Do ... Day the samples are sent to all participants.*

<b>Description of Programme</b>	
<b>No CBL11</b>	<b>Chlorinated hydrocarbons (CHC) and BTEX &amp; C5–C10</b>
List of substances:	<b>CHC:</b> Trichloromethane, 1,1,1-Trichloroethane, Trichloroethene, Tetrachloromethane, Tetrachloroethene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene; <b>BTEX:</b> Benzene, Toluene, Ethylbenzene, sum of m-Xylene and p-Xylene, o-Xylene; <b>C5–C10:</b> n-Pentane, n-Hexane, n-Heptane, n-Octane, n-Nonane, n-Decane
Matrix:	Ambient air
Samples:	2 (+ 1 unloaded tube each)
Sample dispatch:	23 September 2025
Closing date:	21 October 2025
Cost excl. VAT:	EUR 1 060,-

<b>Technical Information</b>					
<b>Parameter to analyse</b>	<b>Tube/sample</b>			<b>Stabilisation</b>	<b>Refrigeration</b>
	<b>Volume</b>	<b>Number</b>	<b>Type</b>		
CHC: Trichloromethane, 1,1,1-Trichloroethane, Trichloroethene, Tetrachloromethane, Tetrachloroethene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene; BTEX: Benzene, Toluene, Ethylbenzene, sum of m-xylene and p-xylene, o-xylene; C5–C10: n-Pentane, n-Hexane, n-Heptane, n-Octane, n-Nonane, n-Decane	-	1 (and 1 unloaded tube)	activated charcoal tube (Orbo 32 S, Supelco)	no	no

**Recommended period to start the sample treatment:** D<sub>0</sub> + 8

*Do ... Day the samples are sent to all participants.*

<b>Description of Programme</b>	
<b>Advance notice 2026:</b>	<b>Per- and polyfluoroalkyl substances in solid samples No PFS02</b>
List of substances:	PF4C-PF13C: PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFNA, PFDA, PFUnDA, PFDoDA, PFTrDA; PF4S-PF13S: PFBS, PFPeS, PFHxS, PFHpS, PFOS, PFNS, PFDS, PFUnDS, PFDoS, PFTrDS, Sum PFAS (calculated sum of 20 parameters PF4C-PF13C and PF4S-PF13S), dry mass
Matrix:	homogenized solid sample (e.g. soil, solid waste sample)
Samples:	2
Sample dispatch:	Note: The next round for PFAS (total contents) will be organized in 2026
Closing date:	4 weeks after sample dispatch
Cost excl. VAT:	EUR 855,-

<b>Technical Information</b>					
<b>Parameter to analyse</b>	<b>Vessel/sample</b>			<b>Stabilisation</b>	<b>Refrigeration</b>
	<b>Volume</b>	<b>Number</b>	<b>Type</b>		
PF4C-PF13C, PF4S-PF13S, dry mass	approx. 0.1 kg	1	plastic container	no	no

**Recommended period to start the sample treatment:** D<sub>0</sub> + 8

*Do ... Day the samples are sent to all participants.*

<b>Description of Programme</b>	
<b>No PFL01</b>	<b>NEW: Per- and polyfluoroalkyl substances – eluate preparation and analysis</b>
List of substances:	Dry mass; in eluate: PF4C-PF13C: PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFNA, PFDA, PFUnDA, PFDoDA, PFTDA; PF4S-PF13S: PFBS, PFPeS, PFHxS, PFHpS, PFOS, PFNS, PFDS, PFUnDS, PFDoS, PFTDS; Sum PFAS (calculated sum of 20 parameters PF4C-PF13C and PF4S-PF13S)
Matrix:	homogenized solid sample (e.g. soil, sewage sludge/compost or solid waste); an aqueous eluate must be prepared for each sample by participants
Samples:	2
Sample dispatch:	02 September 2025
Closing date:	30 September 2025
Cost excl. VAT:	EUR 820,- (introductory price)

<b>Technical Information</b>					
<b>Parameter to analyse</b>	<b>Vessel/sample</b>			<b>Stabilisation</b>	<b>Refrigeration</b>
	<b>Volume</b>	<b>Number</b>	<b>Type</b>		
PF4C-PF13C, PF4S-PF13S	approx. 0.7 kg	1	plastic container	no	no

**Recommended period to start the sample treatment:**D<sub>0</sub> + 2*Do ... Day the samples are sent to all participants.***Electronic registration**

Proficiency Testing Scheme for Water Analysis:

<https://ifatesten.boku.ac.at/>

Proficiency Testing Scheme for Environmental Analysis:

<https://www.umweltbundesamt.at/en/proficiency-testing>

## ANNEX

### Minimum concentrations and performance criterion

The concentrations are at levels typical for natural water samples (ground water, surface water). The pesticides, relevant and non-relevant metabolites of the drinking water ordinance are in a concentration range from 1/4 up to 10-fold of the parameter or action value according to Codex chapter B1/drinking water <https://www.verbrauchergesundheit.gv.at>.

The lower concentration limits are given in the tables below (quantification is required at least from these concentrations). All data obtained during the proficiency testing round are evaluated and presented in the report.

The criterion used to evaluate the participants' performance is the reproducibility standard deviation calculated from previous rounds of proficiency testing with real water samples (more than 6 rounds, since 2013, see tables below). As an alternative criterion, the reproducibility standard deviation vR is calculated from the participants' results after removal of outliers in the current round.

Please find additional information on synthetic water samples at our partner IFA-Tulln website ([www.ifatest.eu](http://www.ifatest.eu)).

<b>Metals and Trace elements M</b>				
<b>Parameter</b>	<b>Unit</b>	<b>Lower limit</b>	<b>Criterion</b>	
Aluminium	µg/l	10	10 %	
Arsenic	µg/l	0.5	13 %	
Cadmium	µg/l	0.01	10 %	
Chromium	µg/l	0.15	8.5 %	
Copper	µg/l	1	9 %	
Iron	µg/l	10	11 %	
Lead	µg/l	0.1	10 %	
Manganese	µg/l	1	7.2 %	
Mercury	µg/l	0.1	14 %	
Nickel	µg/l	0.5	12 %	
Selenium	µg/l	0.3	12 %	
Uranium	µg/l	0.5	6.6 %	
Zinc	µg/l	5	9 %	

<b>Nutrients and Major ions N</b>				
<b>Parameter</b>	<b>Unit</b>	<b>Lower limit</b>	<b>Criterion</b>	
Alkalinity K <sub>S 4.3</sub>	mmol/l	0.4	2.0 %	
Ammonium (as NH <sub>4</sub> <sup>+</sup> )	mg/l	0.01	12 %	
Boron	mg/l	0.015	11 %	
Calcium	mg/l	10	3.1 %	
Chloride	mg/l	1	4.0 %	
DOC dissolved organic carbon (as C)	mg/l	0.5	10 %	

<b>Nutrients and Major ions N</b>				
<b>Parameter</b>	<b>Unit</b>	<b>Lower limit</b>	<b>Criterion</b>	
Electrical conductivity (25 °C)	µS/cm	100	1.3 %	
Hydrogen carbonate	mg/l	20	2.0 %	
K (Potassium)	mg/l	1	5.2 %	
Mg (Magnesium)	mg/l	1	4.0 %	
Na (Sodium)	mg/l	1	3.4 %	
Nitrate (as NO <sub>3</sub> <sup>-</sup> )	mg/l	1	5.0 %	
Nitrite (as NO <sub>2</sub> <sup>-</sup> )	mg/l	0.01	5.3 %	
Ortho-Phosphate (as PO <sub>4</sub> <sup>3-</sup> )	mg/l	0.02	9.0 %	
pH	-	5	2.0 %	
Sulfate SO <sub>4</sub> <sup>2-</sup>	mg/l	1	3.3 %	
Total hardness	mmol/l	0.02	3.0 %	
Total N (total Nitrogen)	mg/l	0.5	8.3 %	
Total P (dissolved as PO <sub>4</sub> <sup>3-</sup> )	mg/l	0.02	7.5 %	

<b>Herbicides/Pesticides - H001</b>				
<b>Parameter</b>	<b>Unit</b>	<b>Lower limit</b>	<b>Criterion</b>	
2,4,5-Trichlorophenoxyacetic acid	µg/l	0.05	18 %	
2,4-D	µg/l	0.05	14 %	
2,6-Dichlorobenzamide	µg/l	0.03	15 %	
Alachlor	µg/l	0.03	12 %	
Alachlor-ESA	µg/l	0.05	13 %	
Alachlor-OA	µg/l	0.05	15 %	
Aminomethylphosphonic acid (AMPA)	µg/l	0.06	13 %	
Atrazine	µg/l	0.03	11 %	
Atrazine-desethyl	µg/l	0.05	12 %	
Atrazine-desethyl-desisopropyl	µg/l	0.05	31 %	
Atrazine-desisopropyl	µg/l	0.05	14 %	
Bentazone	µg/l	0.03	15 %	
Chloridazon-desphenyl	µg/l	0.05	11 %	
*Chlorothalonil Metabolite R417888 (Chlorothalonil-ESA)	µg/l	0.05	18 %	
*Chlorothalonil Metabolite R471811	µg/l	0.07	13 %	
*Chlorothalonil Metabolite R611965	µg/l	0.03	15 %	
*Chlorothalonil Metabolite R611968	µg/l	0.03	vR	
*Chlorothalonil Metabolite SYN507900	µg/l	0.03	vR	
*Chlorothalonil Metabolite SYN548580	µg/l	0.03	vR	
*Chlorothalonil Metabolite SYN548581	µg/l	0.03	vR	
*Chlorothalonil-4-hydroxy	µg/l	0.03	vR	
Clopyralid	µg/l	0.05	20 %	
Cyanazine	µg/l	0.03	14 %	
Dicamba	µg/l	0.05	20 %	

<b>Herbicides/Pesticides – H001</b>				
<b>Parameter</b>	<b>Unit</b>	<b>Lower limit</b>	<b>Criterion</b>	
2,4-DP (Dichlorprop)	µg/l	0.05	12 %	
*Dimethachlor oxalamic acid (CGA 50266)	µg/l	0.025	20 %	
*Dimethachlor ethane sulfonic acid (CGA 354742)	µg/l	0.025	18 %	
*Dimethachlor Metabolite CGA 369873	µg/l	0.03	20 %	
*Dimethachlor Metabolite CGA 373464 (free acid)	µg/l	0.025	vR	
*Dimethachlor Metabolite CGA 373464 (acetic acid methyl ester)	µg/l	0.025	vR	
Dimethachlor Metabolite	µg/l	0.06	34 %	
Glyphosate	µg/l	0.06	20 %	
Metazachlor	µg/l	0.03	12 %	
Metolachlor	µg/l	0.03	15 %	
*S-Metolachlor Metabolite CGA 368208	µg/l	0.075	vR	
*S-Metolachlor Metabolite NOA 413173	µg/l	0.075	vR	
*Metribuzin	µg/l	0.025	vR	
*Glufosinate metabolite MPPA	µg/l	0.10	vR	
Nicosulfuron	µg/l	0.05	25 %	
Prometryn	µg/l	0.03	13 %	
Propazine	µg/l	0.03	13 %	
Sebutethylazine	µg/l	0.03	9 %	
Simazine	µg/l	0.03	11 %	
Terbutethylazine	µg/l	0.03	11 %	
Terbutethylazine-desethyl	µg/l	0.05	11 %	
*Terbutylazin Metabolite SYN 546009 (LM3)	µg/l	0.025	vR	
*Terbutylazin Metabolite CGA 324007 (LM5)	µg/l	0.025	vR	
*Terbutylazin Metabolite SYN 545666 (LM6)	µg/l	0.025	vR	
Terbutryn	µg/l	0.03	10 %	
*Tritosulfuron	µg/l	0.025	vR	

\*additional substances, not accredited

<b>Herbicides/Pesticides – H002</b>				
<b>Parameter</b>	<b>Unit</b>	<b>Lower limit</b>	<b>Criterion</b>	
2,6-Dichlorobenzamide	µg/l	0.03	15 %	
*3,5,6-Trichloro-2-pyridinol	µg/l	0.025	vR	
Acetamiprid	µg/l	0.03	10 %	
Alachlor	µg/l	0.03	12 %	
Aldrin	µg/l	0.02	30 %	
Atrazine	µg/l	0.03	11 %	
Atrazine-desethyl	µg/l	0.05	12 %	
Atrazine-desethyl-desisopropyl	µg/l	0.05	31 %	
Atrazine-desisopropyl	µg/l	0.05	14 %	

<b>Herbicides/Pesticides – H002</b>			
<b>Parameter</b>	<b>Unit</b>	<b>Lower limit</b>	<b>Criterion</b>
Bromacil	µg/l	0.03	14 %
Sum Chlordane	µg/l	0.02	25 %
Chloridazon	µg/l	0.03	13 %
Chloridazon-desphenyl	µg/l	0.05	11 %
Chloridazon-methyl-desphenyl	µg/l	0.03	13 %
Clothianidin	µg/l	0.03	11 %
Cyanazine	µg/l	0.03	14 %
Sum DDD	µg/l	0.02	30 %
Sum DDE	µg/l	0.02	25 %
Sum DDT	µg/l	0.02	39 %
Dieldrin	µg/l	0.02	20 %
*Dimethachlor	µg/l	0.025	vR
Dimethenamid (Dimethenamid-P)	µg/l	0.03	10 %
Dinotefurane	µg/l	0.05	vR
Diuron	µg/l	0.03	13 %
Sum Endosulfan	µg/l	0.02	35 %
Endrin	µg/l	0.02	18 %
Heptachlor	µg/l	0.02	40 %
*Hexazinone	µg/l	0.025	13 %
Imidacloprid	µg/l	0.03	15 %
Lindane	µg/l	0.01	20 %
Mecoprop (MCPP)	µg/l	0.05	13 %
Metazachlor oxanic acid (Metazachlor-OA)	µg/l	0.05	21 %
Metazachlor ethane sulfonic acid (Metazachlor-ESA)	µg/l	0.05	19 %
Metolachlor	µg/l	0.03	15 %
Metolachlor oxanic acid (Metolachlor-OA)	µg/l	0.05	14 %
Metolachlor ethane sulfonic acid (Metolachlor-ESA)	µg/l	0.05	15 %
*Metribuzin-Desamino	µg/l	0.075	vR
N,N-Dimethylsulfamide (DMS)	µg/l	0.05	15 %
Nitenpyram	µg/l	0.05	vR
Prometryn	µg/l	0.03	13 %
Propazine	µg/l	0.03	13 %
*Quinmerac	µg/l	0.025	vR
Sebuthylazine	µg/l	0.03	9 %
Simazine	µg/l	0.03	11 %
Terbutylazine	µg/l	0.03	11 %
*Terbutylazine-2-Hydroxy	µg/l	0.025	16 %
Terbutylazine-desethyl	µg/l	0.05	11 %
Terbutryn	µg/l	0.03	10 %
Thiacloprid	µg/l	0.05	14 %

<b>Herbicides/Pesticides – H002</b>			
<b>Parameter</b>	<b>Unit</b>	<b>Lower limit</b>	<b>Criterion</b>
Thiamethoxam	µg/l	0.05	17 %

\*additional substances, not accredited

<b>Pesticides in accordance with the Drinking Water Ordinance PM</b>			
<b>Pesticides</b>			
<b>Parameter</b>	<b>Unit</b>	<b>Lower limit</b>	<b>Criterion</b>
2,4-D (2,4-Dichlorophenoxyaceticacid)	µg/l	0.025	14 %
2,4-DP (Dichlorprop)	µg/l	0.025	12 %
Alachlor	µg/l	0.025	12 %
Aldrin	µg/l	0.0075	30 %
Atrazine	µg/l	0.025	11 %
Azoxystrobin	µg/l	0.025	15 %
Bentazone	µg/l	0.025	15 %
Bromacil	µg/l	0.025	14 %
Chloridazon	µg/l	0.025	13 %
Clopyralid	µg/l	0.025	20 %
Clothianidin	µg/l	0.025	11 %
Dicamba	µg/l	0.025	20 %
Dieldrin	µg/l	0.0075	20 %
Dimethylchlor	µg/l	0.025	vR
Dimethenamid-P	µg/l	0.025	10 %
Diuron	µg/l	0.025	13 %
Ethofumesat	µg/l	0.025	vR
Flufenacet	µg/l	0.025	vR
Glufosinate	µg/l	0.025	34 %
Glyphosate	µg/l	0.025	20 %
Heptachlor	µg/l	0.0075	40 %
Heptachlorepoxyde	µg/l	0.0075	vR
Hexazinone	µg/l	0.025	13 %
Imidacloprid	µg/l	0.025	15 %
Iodosulfuron-methyl	µg/l	0.025	11 %
Isoproturon	µg/l	0.025	vR
MCPA	µg/l	0.025	15 %
MCPB	µg/l	0.025	11 %
MCPP (Mecoprop)	µg/l	0.025	13 %
Mesosulfuron-methyl	µg/l	0.025	vR
Metalaxy-M	µg/l	0.025	10 %
Metamitron	µg/l	0.025	12 %
Metazachlor	µg/l	0.025	12 %

<b>Pesticides in accordance with the Drinking Water Ordinance PM</b>				
<b>Pesticides</b>				
<b>Parameter</b>		<b>Unit</b>	<b>Lower limit</b>	<b>Criterion</b>
Metolachlor		µg/l	0.025	15 %
Metribuzin		µg/l	0.025	vR
Metsulfuron-methyl		µg/l	0.025	12 %
Nicosulfuron		µg/l	0.025	25 %
Pethoxamid		µg/l	0.025	12 %
Propazine		µg/l	0.025	13 %
Propiconazole		µg/l	0.025	11 %
Simazine		µg/l	0.025	11 %
Terbutylazine		µg/l	0.025	11 %
Thiacloprid		µg/l	0.025	14 %
Thiamethoxam		µg/l	0.025	17 %
Thifensulfuron-methyl		µg/l	0.025	12 %
Tolylfluanid		µg/l	0.025	vR
Tribenuron-methyl		µg/l	0.025	vR
Triclopyr		µg/l	0.025	11 %
Triflusulfuron-methyl		µg/l	0.025	vR
Tritosulfuron		µg/l	0.025	vR

<b>Pesticides in accordance with the Drinking Water Ordinance PM</b>				
<b>Relevant metabolites</b>				
<b>Parameter</b>		<b>Unit</b>	<b>Lower limit</b>	<b>Criterion</b>
2-Amino-4-Methoxy-6-Methyl-1,3,5-Triazine		µg/l	0.025	vR
3,5,6-Trichloro-2-Pyridinol		µg/l	0.025	vR
6-Chloro-1,3,5-Triazine-2,4-Diamine(Atrazine-Desethyl-Desisopropyl)		µg/l	0.025	31 %
Atrazine-Desethyl		µg/l	0.025	12 %
Atrazine-Desisopropyl		µg/l	0.025	14 %
Dimethachlor ethane sulfonic acid (CGA 354742, Dimethachlor-ESA)		µg/l	0.025	18 %
Dimethachlor oxalamic acid (CGA 50266, Dimethachlor-OA)		µg/l	0.025	20 %
Dimethachlor Metabolite – CGA 373464 (free acid)		µg/l	0.025	vR
Dimethachlor Metabolite – CGA 373464 (acetic acid methyl ester)		µg/l	0.025	vR
Dimethachlor Metabolite – CGA 369873		µg/l	0.025	20 %
Isoproturon-Desmethyl		µg/l	0.025	12 %
Propazine-2-Hydroxy		µg/l	0.025	vR
Terbutylazine-Desethyl		µg/l	0.025	11 %
Terbutylazine-2-Hydroxy		µg/l	0.025	16 %
Terbutylazine-2-Hydroxy-Desethyl		µg/l	0.025	17 %

<b>Pesticides in accordance with the Drinking Water Ordinance PM</b>			
<b>Relevant metabolites</b>			
<b>Parameter</b>	<b>Unit</b>	<b>Lower limit</b>	<b>Criterion</b>
<b>Pesticides in accordance with the Drinking Water Ordinance PM</b>			
<b>Non-relevant metabolites</b>			
<b>Parameter</b>	<b>Unit</b>	<b>Lower limit</b>	<b>Criterion</b>
2,6-Dichlorobenzamide	µg/l	0.75	15 %
Alachlor-t-acid (Alachlor-OA)	µg/l	0.75	15 %
Alachlor-t-sulfonic acid (Alachlor-ESA)	µg/l	0.75	13 %
Aminomethyl-phosphonic acid (AMPA)	µg/l	0.75	13 %
Atrazine-2-Hydroxy	µg/l	0.75	vR
Azoxystrobin-O-Demethyl (CyPM)	µg/l	0.25	vR
Chloridazon-Desphenyl	µg/l	0.75	11 %
Chloridazon-Methyl-Desphenyl	µg/l	0.75	13 %
Chlorothalonil-sulphonic acid (R417888)	µg/l	0.75	18 %
Chlorothalonil metabolite R611965 (3-carbamyl-2,4,5-trichlorobenzoic acid)	µg/l	0.75	15 %
*Chlorothalonil metabolite R471811	µg/l	0.75	13 %
Dimethenamid-P-sulfonic acid (Dimethenamid-ESA)	µg/l	0.125	18 %
Dimethenamid-P-acid (Dimethenamid-OA)	µg/l	0.125	vR
Flufenacet sulfonic acid (Flufenacet-ESA)	µg/l	0.25	23 %
Flufenacet oxanilic acid (Flufenacet-OA)	µg/l	0.075	30 %
Metazachlor ethane sulfonic acid (Metazachlor-ESA)	µg/l	0.75	19 %
Metazachlor oxanilic acid (Metazachlor-OA)	µg/l	0.75	21 %
Metribuzin-Desamino	µg/l	0.075	vR
N,N-Dimethylsulfamide (DMS)	µg/l	0.25	15 %
s-Metolachlor ethanesulfonic acid (Metolachlor-ESA)	µg/l	0.75	15 %
s-Metolachlor oxanilic acid (Metolachlor-OA)	µg/l	0.75	14 %
s-Metolachlor Metabolite NOA 413173	µg/l	0.075	vR
s-Metolachlor Metabolite CGA 368208	µg/l	0.075	vR

\* additional substance, not accredited

<b>PM05-E Option – extended scope pesticides and metabolites</b>				
<b>Pesticides</b>				
<b>Parameter</b>	<b>Unit</b>	<b>Lower limit</b>	<b>Criterion</b>	
*Ethidimuron	µg/l	0.025	vR	
*Quinmerac	µg/l	0.025	vR	
*Bromoxynil	µg/l	0.025	vR	
*Flazasulfuron	µg/l	0.025	vR	
<b>Metabolites</b>				
<b>Parameter</b>	<b>Unit</b>	<b>Lower limit</b>	<b>Criterion</b>	
*Chlorothalonil metabolite SYN 507900	µg/l	0.025	vR	
*Nicosulfuron metabolite UCSN	µg/l	0.025	vR	
*Terbutylazine metabolite SYN 546009 (LM3)	µg/l	0.025	vR	
*Terbutylazine metabolite CGA 324007 (LM5)	µg/l	0.025	vR	
*Terbutylazine metabolite SYN 545666 (LM6)	µg/l	0.025	vR	
*Desaminometamitron	µg/l	0.025	vR	
*Metazachlor metabolite BH 479-9	µg/l	0.025	vR	

\* additional substances, not accredited

<b>Polycyclic aromatic hydrocarbons (PAH) P</b>				
<b>Parameter</b>	<b>Unit</b>	<b>Lower limit</b>	<b>Criterion</b>	
Acenaphthene	ng/l	5	19 %	
Acenaphthylene	ng/l	5	24 %	
Anthracene	ng/l	5	21 %	
Benzo(a)anthracene	ng/l	5	21 %	
Benzo(a)pyrene	ng/l	5	24 %	
Benzo(b)fluoranthene	ng/l	5	17 %	
Benzo(g,h,i)perylene	ng/l	5	25 %	
Benzo(k)fluoranthene	ng/l	5	21 %	
Chrysene	ng/l	5	22 %	
Dibenzo(a,h)anthracene	ng/l	5	30 %	
Fluoranthene	ng/l	5	18 %	
Fluorene	ng/l	5	14 %	
Indeno(1,2,3-cd)pyrene	ng/l	5	25 %	
Naphthalene	ng/l	5	21 %	
Phenanthrene	ng/l	5	15 %	
Pyrene	ng/l	5	16 %	

<b>Pharmaceuticals, Industrial Chemicals and Artificial Sweeteners AZ</b>			
<b>Parameter</b>	<b>Unit</b>	<b>Lower limit</b>	<b>Criterion</b>
10,11-Dihydro-10,11-Dihydroxycarbamazepine	µg/l	0.05	20 %
4-Acetylaminooantipyrine	µg/l	0.05	13 %
4-Formylaminooantipyrine	µg/l	0.05	12 %
Acesulfame	µg/l	0.05	17 %
Amidotrizoic acid	µg/l	0.05	20 %
Atenolol	µg/l	0.05	20 %
Benzotriazole	µg/l	0.05	12 %
Bisoprolol	µg/l	0.05	19 %
Carbamazepine	µg/l	0.03	13 %
Cyclamate	µg/l	0.03	20 %
Diazepam	µg/l	0.05	15 %
Diclofenac	µg/l	0.05	14 %
Ibuprofen	µg/l	0.05	12 %
Iopamidol	µg/l	0.05	23 %
Metoprolol	µg/l	0.05	20 %
Saccharin	µg/l	0.05	15 %
Sotalol	µg/l	0.05	22 %
Sucralose	µg/l	0.05	25 %
Sulfamethoxazole	µg/l	0.05	12 %

<b>Sum parameters: Hydrocarbon oil index and Phenol index SP</b>			
<b>Parameter</b>	<b>Unit</b>	<b>Lower limit</b>	<b>Criterion</b>
Hydrocarbon oil index	mg/l	0.1	40 %
Phenol index	mg/l	0.01	11 %

<b>Volatile Halogenated Hydrocarbons (VHH) C</b>			
<b>Parameter</b>	<b>Unit</b>	<b>Lower limit</b>	<b>Criterion</b>
1,1,1-Trichloroethane	µg/l	0.15	15 %
1,1-Dichloroethene	µg/l	0.5	17 %
1,2-Dichloroethane	µg/l	0.5	13 %
Bromodichloromethane	µg/l	0.15	10 %
cis-1,2-Dichloroethene	µg/l	0.15	10 %
Dibromochloromethane	µg/l	0.15	12 %
Dichloromethane	µg/l	1	13 %
Tetrachloroethene	µg/l	0.15	17 %
Tetrachloromethane	µg/l	0.15	16 %
trans-1,2-Dichloroethene	µg/l	0.15	20 %
Tribromomethane	µg/l	0.15	12 %
Trichloroethene	µg/l	0.15	15 %

<b>Volatile Halogenated Hydrocarbons (VHH) C</b>			
<b>Parameter</b>	<b>Unit</b>	<b>Lower limit</b>	<b>Criterion</b>
Trichloromethane	µg/l	0.25	13 %
<b>BTEX and MTBE B</b>			
<b>Parameter</b>	<b>Unit</b>	<b>Lower limit</b>	<b>Criterion</b>
Benzene	µg/l	0.5	16 %
Ethylbenzene	µg/l	0.5	20 %
o-Xylene	µg/l	0.5	15 %
Sum of m-Xylene and p-Xylene	µg/l	1	20 %
Toluene	µg/l	0.5	22 %
Methyl-tert-butylether (MTBE)	µg/l	0.5	13 %
<b>PFAS per- and polyfluoroalkyl substances (linear and branched PFHxS, PFOS) PF</b>			
<b>Parameter</b>	<b>Unit</b>	<b>Lower limit</b>	<b>Criterion</b>
*Perfluorobutanoic acid (PFBA) – PF4C	µg/l	0.005	vR
*Perfluoropentanoic acid (PFPeA) – PF5C	µg/l	0.005	vR
*Perfluorohexanoic acid (PFHxA) – PF6C	µg/l	0.005	vR
*Perfluoroheptanoic acid (PFHpA) – PF7C	µg/l	0.005	vR
*Perfluorooctanoic acid (PFOA) – PF8C	µg/l	0.005	vR
*Perfluorononanoic acid (PFNA) – PF9C	µg/l	0.005	vR
*Perfluorodecanoic acid (PFDA) – PF10C	µg/l	0.005	vR
*Perfluoroundecanoic acid (PFUnDA) – PF11C	µg/l	0.005	vR
*Perfluorododecanoic acid (PFDoDA) – PF12C	µg/l	0.005	vR
*Perfluorotridecanoic acid (PFTrDA) – PF13C	µg/l	0.005	vR
*Perfluorotetradecanoic acid (PFTeDA) – PF14C	µg/l	0.005	vR
*Perfluorobutane sulfonic acid (PFBS) – PF4S	µg/l	0.005	vR
*Perfluoropentane sulfonic acid (PFPeS) – PF5S	µg/l	0.005	vR
*Perfluorohexane sulfonic acid (Total PFHxS)	µg/l	0.005	vR
*linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.004	vR
*branched Perfluorohexane sulfonic acid isomers (br-PFHxS (sum))	µg/l	0.001	vR
*Perfluoroheptane sulfonic acid (PFHpS) – PF7S	µg/l	0.005	vR
*Perfluorooctane sulfonic acid (Total PFOS)	µg/l	0.005	vR
*linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.004	vR
*branched Perfluorooctane sulfonic acid isomers (br-PFOS (sum))	µg/l	0.001	vR
*Perfluorononane sulfonic acid (PFNS) – PF9S	µg/l	0.005	vR
*Perfluorodecane sulfonic acid (PFDS) – PF10S	µg/l	0.005	vR
*Perfluoroundecane sulfonic acid (PFUnDS) – PF11S	µg/l	0.010	vR

<b>PFAS per- and polyfluoroalkyl substances (linear and branched PFHxS, PFOS) PF</b>			
<b>Parameter</b>	<b>Unit</b>	<b>Lower limit</b>	<b>Criterion</b>
*Perfluorododecane sulfonic acid (PFDoS) – PF12S	µg/l	0.010	vR
*Perfluorotridecane sulfonic acid (PFTrDS) – PF13S	µg/l	0.010	vR
*N-Ethyl-perfluorooctane sulfonamidoacetic acid (N-EtFOSAA)	µg/l	0.005	vR
*4:2 Fluorotelomer sulfonate (4:2 FTS)	µg/l	0.005	vR
*6:2 Fluorotelomer sulfonate (6:2 FTS)	µg/l	0.005	vR
*8:2 Fluorotelomer sulfonate (8:2 FTS)	µg/l	0.005	vR
*Perfluoro-4,8-dioxa-3H-nonanoic acid (DONA)	µg/l	0.005	vR
*2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propanoic acid (GenX)	µg/l	0.005	vR
*9-Chlorohexadecafluoro-3-oxanone sulfonic acid (main component F-53B)	µg/l	0.005	vR

\* NEW, not accredited