

BASE PARAMETERS AND INDICATORS IN WATERS



Participate in AGLAE's External Quality Control



A WAY OF WORKING THAT PROVIDES YOU WITH THE HIGHEST STANDARD OF RESULTS WITH CONFIDENTIALITY AND IMPARTIALITY

Each step of the way, AGLAE is there supporting you.

REGISTRATIONS FOR PROFICIENCY TESTING ARE DONE KNOWING THE WHOLE PROCESS, WITH A DETAILED AND RIGOROUS SCHEDULE



- ✓ The number of evaluations per year for each parameter is specified in the catalogue, concentration levels and stabilisation are available on request.
- ✓ AGLAE uses "express" shipments for your samples and makes sure of their distribution to your laboratory.
- ✓ A sufficient delay to analyse and the report the results.
- ✓ Via your member area, **enter your results and find instructions, assigned codes, reports, summaries of your results, certificate of participation...**

THE OPTIMISATION OF RISK MANAGEMENT FOR YOUR LABORATORY

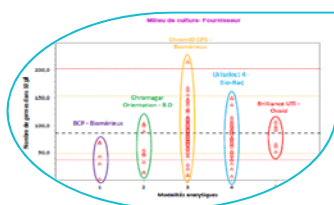


You have a better visibility of potential anomalies through:

- ✓ An appropriate test design (duplicate samples, repeated measurements),
- ✓ A large number of participants: around 200 laboratories in the field of 'base' physico-chemical analyses.

AGLAE's detailed study:

- ✓ Influence of the analytical methods, manufacturers (equipment and consumables)... factors that we study to help you improve the quality of your analyses,
- ✓ Check of your uncertainty estimates in chemistry (zeta-score),
- ✓ A report validated by experts of the field and personalised for most tests.



ATTRACTIVE DISCOUNTS, PAYMENT CONDITIONS MADE EASIER

- Choose among the various programmes and benefit from discounts up to 15%,
- A possible payment in 2 or 3 folds depending on the amount your participation.
- Payment possible by cheque (in €), bank transfer, credit card on <https://www.helloasso.com/associations/a-g-l-a-e/paiements/aglae>

Amount of your invoice (excluding transport fees)	Discount
3000 ≤ Amount < 6000 € excl. VAT	5%
6000 ≤ Amount < 9000 € excl. VAT	10%
Amount ≥ 9000 € excl. VAT	15%

**And exclusively for AGLAE's members:
experimental tests at an attractive price during the year**

PROGRAMME 1A: CHEMICAL ANALYSES IN FRESH WATERS

The materials are suitable for the check of analyses in clear freshwaters, public drinking waters, spring waters and non-atypical natural mineral waters.



296 € excl. VAT – total amount for 2 tests (excluding transport costs)

225 participants in 2022 – EXPERIENCE > 25 YEARS



Need to test another method, evaluate your staff?

Order **additional test samples** (parcel in its entirety): **75 € excl. VAT** (excluding transport costs)

23M1A.1 - Clean water - sent in February 2023 - Refrigerated parcel

colour by comparison with hexachloroplatinate (without filtration), colour using (NF EN) ISO 7887 method B (without filtration)^[1], conductivity, F^- , NH_4^+ , NO_2^- , NO_3^- , pH, REDOX potential, turbidity

Ca^{2+} , Cl^- , K^+ , Mg^{2+} , Na^+ , PO_4^{3-} , SO_4^{2-} , soluble silicates, degree of hardness, total alkalinity, total organic carbon (TOC), total silica

total organic carbon (TOC), permanganate index

23M1A.2 - Clean water - sent in November 2023 - Refrigerated parcel

colour by comparison with hexachloroplatinate (without filtration), colour using (NF EN) ISO 7887 method B (without filtration)^[1], conductivity, F^- , NH_4^+ , NO_2^- , NO_3^- , pH, REDOX potential, turbidity

Ca^{2+} , Cl^- , K^+ , Mg^{2+} , Na^+ , PO_4^{3-} , SO_4^{2-} , soluble silicates, degree of hardness, total alkalinity, total organic carbon (TOC), total silica

total organic carbon (TOC), permanganate index

^[1] parameter not covered by accreditation (see general conditions of registration)

PARTICULARITIES

Colour by comparison with hexachloroplatinate (without filtration): The colour can be determined by visual comparison according to (NF EN) ISO 7887 - method D or by spectrophotometry according to (NF EN) ISO 7887 - method C.

Colour using (NF EN) ISO 7887 method B (without filtration): The colour determination according to (NF EN) ISO 7887 method B without filtration can be carried out on these samples.

'Environment approval': register also for the programme 1Ab. The parameters concerned by the French Order of the 27/10/11 completed by the order of the 19/10/19 will be at low concentration levels.

PROGRAMME 1Ab: CHEMICAL ANALYSES IN FRESH WATERS AT LOW CONCENTRATION LEVELS

The materials are suitable for the check of analyses in clear freshwaters, public drinking waters, spring waters and non-atypical natural mineral waters.



217 € excl. VAT – total amount for 1 test (excluding transport costs)

127 participants in 2022 – EXPERIENCE > 25 YEARS



Need to test another method, evaluate your staff?

Order **additional test samples** (parcel in its entirety): **110 € excl. VAT** (excluding transport costs)

23M1Ab.1 - Clean water - sent in June 2023 - Refrigerated parcel

colour by comparison with hexachloroplatinate (without filtration), conductivity, F^- , NH_4^+ , NO_2^- , NO_3^- , pH, REDOX potential, turbidity

Ca^{2+} , Cl^- , K^+ , Mg^{2+} , Na^+ , PO_4^{3-} , SO_4^{2-} , soluble silicates, degree of hardness, total alkalinity, total organic carbon (TOC), total silica

total organic carbon (TOC), permanganate index

PARTICULARITIES

Colour by comparison with hexachloroplatinate (without filtration): The colour can be determined by visual comparison according to (NF EN) ISO 7887 - method D or by spectrophotometry according to (NF EN) ISO 7887 - method C.

'Environment approval': this is an additional proficiency test identical to the tests of programme 1A but at low concentration levels to meet the requirements of the French Order of the 27/10/11 completed by the order of the 19/10/19 for the relevant parameters (as long as it is possible to maintain the quality of the test).

PROGRAMME 1B: INDICATORS IN FRESH WATERS



161 € excl. VAT – total amount for 2 tests (excluding transport costs)

136 participants in 2022 – EXPERIENCE > 20 YEARS



Need to test another method, evaluate your staff?

Order **additional test samples** (parcel in its entirety): **45 € excl. VAT** (excluding transport costs)

23M1B.1 - Natural water - sent in February 2023 - Refrigerated parcel

Chemical Oxygen Demand,
Chemical Oxygen Demand (Sealed Tube method),
DOC, total organic carbon (TOC),
Total bound nitrogen (TN_b measured),
Total Kjeldahl Nitrogen (TKN), Total-P

biochemical oxygen demand after 5 days

total suspended solids (TSS)

23M1B.2 - Natural water - sent in October 2023 - Refrigerated parcel

Chemical Oxygen Demand,
Chemical Oxygen Demand (Sealed Tube method),
DOC, total organic carbon (TOC),
Total bound nitrogen (TN_b measured),
Total Kjeldahl Nitrogen (TKN), Total-P

biochemical oxygen demand after 5 days

total suspended solids (TSS)

PROGRAMME 1C: CHLOROPHYLL A AND PHEOPIGMENTS INDEX IN FRESH WATERS



193 € excl. VAT – total amount for 2 tests (excluding transport costs)

43 participants in 2022 – EXPERIENCE: 20 YEARS



Need to test another method, evaluate your staff?

Order **additional test samples** (parcel in its entirety): **50 € excl. VAT** (excluding transport costs)

23M1C.1 - Natural water - sent in June 2023 - Refrigerated parcel

chlorophyll a, pheopigments index

23M1C.2 - Natural water - sent in September 2023 - Refrigerated parcel

chlorophyll a, pheopigments index

PARTICULARITIES

Chlorophyll a and pheopigments index: after extraction, measurement of the absorption by molecular absorption spectrometry then calculation of the concentrations using the LORENZEN or the SCOR-UNESCO equation.

PROGRAMME 1D: FIELD PARAMETERS IN FRESH WATERS

The materials are suitable for the check of analyses in public drinking waters, spring waters and non-atypical natural mineral waters.



228 € excl. VAT – total amount for 2 tests (excluding transport costs)

174 participants in 2022 – EXPERIENCE: 15 YEARS



Need to test another method, evaluate your staff?

Order **additional test samples** (parcel in its entirety): **60 € excl. VAT** (excluding transport costs)

23M1D.1 - Clean water - sent in January 2023 - Refrigerated parcel

conductivity, free chlorine (or available chlorine), isocyanuric acid, pH, REDOX potential, total chlorine

23M1D.2 - Clean water - sent in September 2023 - Refrigerated parcel

conductivity, free chlorine (or available chlorine), isocyanuric acid, pH, REDOX potential, total chlorine

PARTICULARITIES

To evaluate the quality of your sampling, AGLAE conducts tests "In situ measurements and sampling in different types of water" in several regions of Metropolitan France.

➔ Check the programmes 100 (conducted in French only).

In the frame of your accreditation scope, you may also be interested in the programme 1E 'Dissolved oxygen in fresh waters'.

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PROGRAMME 1E: DISSOLVED OXYGEN IN FRESH WATERS

The materials are suitable for the check of analyses in public drinking waters, spring waters and non-atypical natural mineral waters.



120 € excl. VAT – total amount for 2 tests (excluding transport costs)

128 participants in 2022 – EXPERIENCE > 10 YEARS



Need to test another method, evaluate your staff?

Order **additional test samples** (parcel in its entirety): **30 € excl. VAT** (excluding transport costs)

23M1E.1 - Clean water - sent in January 2023 - Refrigerated parcel

dissolved O₂

23M1E.2 - Clean water - sent in June 2023 - Refrigerated parcel

dissolved O₂

PARTICULARITIES

To evaluate the quality of your sampling, AGLAE conducts tests "In situ measurements and sampling in different types of water" in several regions of Metropolitan France.

➔ Check the programmes 100 (conducted in French only).

In the frame of your accreditation scope, you may also be interested in the programme 1D 'Field parameters in fresh waters'.

PROGRAMME 1G: DRY RESIDUE IN FRESH WATERS

The materials are suitable for the check of analyses in public drinking waters, spring waters and non-atypical natural mineral waters.



76 € excl. VAT – total amount for 2 tests (excluding transport costs)

63 participants in 2022 – EXPERIENCE: 10 YEARS



Need to test another method, evaluate your staff?

Order **additional test samples** (parcel in its entirety): **20 € excl. VAT** (excluding transport costs)

23M1G.1 - Clean water - sent in January 2023 - Refrigerated parcel

Dry residue at 105°C, Dry residue at 180°C

23M1G.2 - Clean water - sent in May 2023 - Refrigerated parcel

Dry residue at 105°C, Dry residue at 180°C

PROGRAMME 1H: PHYSICO-CHEMICAL INDICATORS IN SWIMMING POOL WATERS



250 € excl. VAT – total amount for 2 tests (excluding transport costs)

51 participants in 2022 – EXPERIENCE: 3 YEARS



Need to test another method, evaluate your staff?

Order **additional test samples** (parcel in its entirety): **65 € excl. VAT** (excluding transport costs)

23M1H.1 – Swimming pool water - sent in April 2023 - Refrigerated parcel

isocyanuric acid,
free chlorine (or available chlorine), total chlorine, Cl⁻, pH

Total organic carbon (TOC)

23M1H.2 - Swimming pool water - sent in September 2023 - Refrigerated parcel

isocyanuric acid,
free chlorine (or available chlorine), total chlorine, Cl⁻, pH

Total organic carbon (TOC)

PROGRAMME 50: PERCHLORATES AND DISINFECTION BY-PRODUCTS IN FRESH WATERS

The materials are suitable for the check of analyses in public drinking waters, spring waters and non-atypical natural mineral waters.



242 € excl. VAT – total amount for 2 tests (excluding transport costs)

53 participants in 2022 – EXPERIENCE > 20 YEARS



Need to test another method, evaluate your staff?

Order **additional test samples** (parcel in its entirety): **65 € excl. VAT** (excluding transport costs)

23M50.1 - Clean water - sent in February 2023 - Refrigerated parcel

Br^- , ClO_4^-

BrO_3^- , ClO_2^- , ClO_3^-

23M50.2 - Clean water - sent in September 2023 - Refrigerated parcel

Br^- , ClO_4^-

BrO_3^- , ClO_2^- , ClO_3^-

PROGRAMME 50A: DISINFECTION BY-PRODUCTS IN SWIMMING POOL WATERS



149 € excl. VAT – total amount for 1 test (excluding transport costs)

49 participants in 2022 – EXPERIENCE > 5 YEARS



Need to test another method, evaluate your staff?

Order **additional test samples** (parcel in its entirety): **75 € excl. VAT** (excluding transport costs)

23M50A.1 - Swimming pool water - sent in May 2023 - Refrigerated parcel

Br^- , BrO_3^-

ClO_2^- , ClO_3^-

PROGRAMME 91: ODOUR AND FLAVOUR IN WATERS INTENDED FOR HUMAN CONSUMPTION

The materials are suitable for the check of analyses in public drinking waters, spring waters and non-atypical natural mineral waters.



190 € excl. VAT – total amount for 2 tests (excluding transport costs)

18 participants in 2022 – EXPERIENCE > 5 YEARS



Need to test another method, evaluate your staff?

Order **additional test samples** (parcel in its entirety): **50 € excl. VAT** (excluding transport costs)

23M91.1 - Clean water - sent in April 2023 - Refrigerated parcel

Threshold Odour Number - TON

Threshold Flavour Number - TFN

23M91.2 - Clean water - sent in September 2023 - Refrigerated parcel

Threshold Odour Number - TON

Threshold Flavour Number - TFN

PARTICULARITIES

Threshold odour number (TON) and threshold flavour number (TFN) by the complete method by paired comparison with non-forced choice according to NF EN 1622 standard.

Panel of 5 assessors maximum for each test.

PROGRAMME 2A: CHEMICAL ANALYSES IN WASTE WATERS



206 € excl. VAT – total amount for 2 tests (excluding transport costs)

135 participants in 2022 – EXPERIENCE > 25 YEARS



Need to test another method, evaluate your staff?

Order **additional test samples** (parcel in its entirety): **55 € excl. VAT** (excluding transport costs)

23M2A.1 - Waste water - sent in April 2023 - Refrigerated parcel

Dissolved salts, F⁻, conductivity, pH, soluble silicates, total silica (Si)

Dissolved calcium (Ca²⁺), total calcium (Ca), Cl⁻, K⁺, dissolved magnesium (Mg²⁺), total magnesium (Mg), Na⁺, SO₄²⁻, total alkalinity

PO₄³⁻

23M2A.2 - Waste water - sent in September 2023 - Refrigerated parcel

Dissolved salts, F⁻, conductivity, pH, soluble silicates, total silica (Si)

Dissolved calcium (Ca²⁺), total calcium (Ca), Cl⁻, K⁺, dissolved magnesium (Mg²⁺), total magnesium (Mg), Na⁺, SO₄²⁻, total alkalinity

PO₄³⁻

PARTICULARITIES

Dissolved salts: evaluation of the quantity of dissolved matters from the measurement of the theoretical electrical conductivity according to NF T90-111 or any other equivalent standard; the results have to be reported in µS/cm.

Total silica (Si), total calcium (Ca), total magnesium (Mg): analysed parameters taking into account dissolved and particulate forms.

PROGRAMME 2B: INDICATORS IN WASTE WATERS



264 € excl. VAT – total amount for 2 tests (excluding transport costs)

203 participants in 2022 – EXPERIENCE > 25 YEARS



Need to test another method, evaluate your staff?

Order **additional test samples** (parcel in its entirety): **70 € excl. VAT** (excluding transport costs)

23M2B.1 - Waste water - sent in March 2023 - Refrigerated parcel

Br⁻, NH₄⁺, NO₂⁻, NO₃⁻, conductivity, pH

DOC, total organic carbon (TOC), Total Kjeldahl Nitrogen (TKN), Total bound nitrogen (TN_b measured), Total-P

total suspended solids (TSS)

Chemical Oxygen Demand, Chemical Oxygen Demand (Sealed Tube method), Cl⁻

BOD₅

23M2B.2 - Waste water - sent in September 2023 - Refrigerated parcel

Br⁻, NH₄⁺, NO₂⁻, NO₃⁻, conductivity, pH

DOC, total organic carbon (TOC), Total Kjeldahl Nitrogen (TKN), Total bound nitrogen (TN_b measured), Total-P

total suspended solids (TSS)

Chemical Oxygen Demand, Chemical Oxygen Demand (Sealed Tube method), Cl⁻

BOD₅

PARTICULARITIES

'Environment approval':

- ☞ Register also for the programme 2C. The parameters concerned by the French Order of the 27/10/11 completed by the order of the 19/10/19 will be at low concentration levels.
- ☞ Register also for the programme 2F. The ST-COD contents will be low and between 10 mg of O₂/L and 30 mg of O₂/L.

PROGRAMME 2C: INDICATORS IN WASTE WATERS AT LOW CONCENTRATION LEVELS



141 € excl. VAT – total amount for 1 test (excluding transport costs)

127 participants in 2022 – EXPERIENCE > 25 YEARS



Need to test another method, evaluate your staff?

Order **additional test samples** (parcel in its entirety): **75 € excl. VAT** (excluding transport costs)

Parameters to analyse	Bottle		Number of measurements per parameter and per bottle
	Volume	Number	
23M2C.1 - Waste water - sent in November 2023 - Refrigerated parcel			
Br ⁻ , NH ₄ ⁺ , NO ₂ ⁻ , NO ₃ ⁻ , conductivity, pH	1000 mL	2	2
DOC, total organic carbon (TOC), Total Kjeldahl Nitrogen (TKN), Total bound nitrogen (TN _b measured), Total-P	1000 mL	2	2
total suspended solids (TSS)	1000 mL	2	2
Chemical Oxygen Demand, Chemical Oxygen Demand (Sealed Tube method), Cl ⁻	1000 mL	2	2
BOD ₅			1

PARTICULARITIES

'Environment approval': this is an additional proficiency test identical to the tests of programme 2B but at low concentration levels to meet the requirements of the French Order of the 27/10/11 completed by the order of the 19/10/19 for the relevant parameters (as long as it is possible to maintain the quality of the test).

☞ Register also for the programme 2F. The ST-COD contents will be low and between 10 mg of O₂/L and 30 mg of O₂/L.

Recommended period to start the sample treatment (PRDT): time interval during which the quality of test materials is optimal (in number of days)	
BOD ₅ , Chemical Oxygen Demand, Chemical Oxygen Demand (Sealed Tube method), pH, total suspended solids (TSS)	D ₀ +1
DOC, total organic carbon (TOC), NH ₄ ⁺ , NO ₂ ⁻ , NO ₃ ⁻ , Total Kjeldahl Nitrogen (TKN), Total bound nitrogen (TN _b measured), conductivity	D ₀ +3
Br ⁻ , Cl ⁻ , Total-P	D ₀ +10

D₀: Day the samples are sent to all the participants (for most proficiency tests, Tuesday)

PROGRAMME 2D: FIELD PARAMETERS AND COLOUR IN WASTE WATERS



86 € excl. VAT – total amount for 2 tests (excluding transport costs)

103 participants in 2022 – EXPERIENCE: 5 YEARS



Need to test another method, evaluate your staff?

Order **additional test samples** (parcel in its entirety): **25 € excl. VAT** (excluding transport costs)

23M2D.1 - Waste water - sent in March 2023 - Refrigerated parcel

pH, conductivity, turbidity, REDOX potential, true colour by comparison with hexachloroplatinate

23M2D.2 - Waste water - sent in October 2023 - Refrigerated parcel

pH, conductivity, turbidity, REDOX potential, true colour by comparison with hexachloroplatinate

PARTICULARITIES



True colour analysed by spectrophotometry according to method C of the NF EN ISO 7887 standard. The determination of the true colour according to the method D of the NF EN ISO 7887 standard can be carried out.

In order to evaluate the quality of your samplings, AGLAE conducts proficiency tests "Sampling using automatic samplers in treatment plant" in Metropolitan France.

→ Check the programme(s) 101 (conducted in French only)

PROGRAMME 2F: ST-COD AT LOW CONTENTS IN WASTE WATERS



94 € excl. VAT – total amount for 1 test (excluding transport costs)

54 participants in 2022 – EXPERIENCE: 1 YEAR



Need to test another method, evaluate your staff?

Order **additional test samples** (parcel in its entirety): **50 € excl. VAT** (excluding transport costs)

New
in the catalogue

23M2F.1 - Waste water - sent in June 2023 - Refrigerated parcel

Cl⁻, Chemical Oxygen Demand (Sealed Tube method)

PARTICULARITIES

In the frame of this proficiency test, ST-COD contents will be low and between 10 mg of O₂/L and 30 mg of O₂/L.

Test samples may contain high chloride contents, which will nevertheless be representative of the levels found in routine wastewater.

PROGRAMME 6: CHEMICAL ANALYSES IN SALINE WATERS



661 € excl. VAT – total amount for 2 tests (excluding transport costs)

30 participants in 2022 – EXPERIENCE > 20 YEARS



Need to test another method, evaluate your staff?

Order **additional test samples** (parcel in its entirety): **170 € excl. VAT** (excluding transport costs)

23M6.1 - Saline and brackish water - sent in June 2023 - Refrigerated parcel

NH_4^+ , NO_2^- , NO_3^- , PO_4^{3-} , dissolved silica, Total-P

pH, salinity, total organic carbon (TOC)

total suspended solids (TSS)

turbidity

23M6.2 - Saline and brackish water - sent in September 2023 - Refrigerated parcel

NH_4^+ , NO_2^- , NO_3^- , PO_4^{3-} , dissolved silica, Total-P

pH, salinity, total organic carbon (TOC)

total suspended solids (TSS)

turbidity

PARTICULARITIES

For dissolved oxygen in saline and brackish waters, you may register for the programme 6A.

PROGRAMME 6A: DISSOLVED OXYGEN IN SALINE WATERS

120 € excl. VAT – total amount for 1 test (excluding transport costs)

New

New in 2023



Need to test another method, evaluate your staff?

Order **additional test samples** (parcel in its entirety): **60 € excl. VAT** (excluding transport costs)

23M6A.1 - Saline and brackish water - sent in September 2023 - Refrigerated parcel

Dissolved O₂

PARTICULARITIES

Test conducted for a minimum of 10 participants.

For chemical analyses in saline and brackish waters, you may register for programme 6.