

# Proficiency Testing Schemes

ielab 2026

Issue September 15th, 2025





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# ielab: experience, commitment and quality

ielab is an international scope company dedicated to the provision of services and products for the application of quality in laboratories

Our commitment to quality and efficiency is demonstrated by our certifications and accreditations:



ISO 9001:2015 Certification of all the activities





Accreditation according to ISO/IEC 17043 Standard as Provider of Proficiency Testing Schemes, according to the scope of accreditation N° 2/PPI007





Accreditation according to ISO 17034 Standard as Producer of Reference Materials (BACredi line), according to the scope of accreditation N° 1/PMR001



# Our services



Proficiency Testing Schemes



Kits for Molecular Diagnostic by qPCR



Microbiological and Physicalchemical Reference Materials

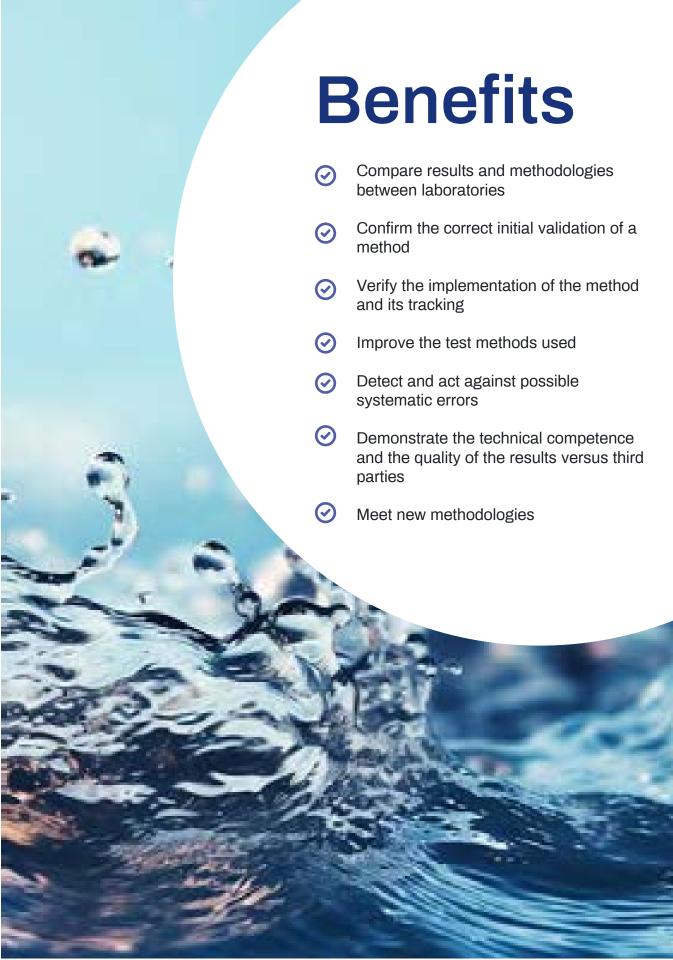


Technological solutions tailored to customer needs



Check and order online all our services: <a href="https://tienda.ielab.es/">https://tienda.ielab.es/</a>







# Why ielab?

Trust, experience and reliability

>1.600
participants
cared for in
60 countries



Specific management **Software** for statistics

**Custom reports** 

>20 years organizing Proficiency Testing Schemes

Highly qualified staff



24
Proficiency Testing
Schemes

54 rounds/year 11 matrices

>320
microbiological and physical-chemical parameters

Downloading of participation **certificates** 

Robustness of the schemes

Compliance requirements
ISO 17043 and 13528 standards

Participants from various sectors and typologies, national and international



Closeness to the customer

Specialized and personalized attention



# Information management systems



#### Website

www.ielab.es

- ▶ Rounds registration
- Instructions
- Results and reports
- ▶ Certificates



#### Online store

https://tienda.ielab.es

- Reference materials
- Molecular biology solutions
- Customized R&D services



## Statistical data processing software

- Speed and automation
- ► General and custom reports



## Software for PTS management

- Customer data
- Invoicing





	- 1	Design
	_	Design based on new laws and needs
		Strains from environmental isolates, study of possible
		interferences and use of false positives/false negatives
	2	Sample Preparation
		Natural or spiked samples and matrices
		Quality control carried out by accredited laboratories
		Studies of stability and homogeneity in laboratories ISO
		17025 Standard
	9	Carranta Chirara ant
	3	Sample Shipment
		Real simulation of shipping conditions for the microbiological
40		<ul> <li>rounds and control of temperature</li> <li>Advance online delivery of instructions and documentation</li> </ul>
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		Robust statistics according to the international guide ISO 13528      Robust statistics according to the international guide ISO 13528      Robust statistics according to the international guide ISO 13528      Robust statistics according to the international guide ISO 13528      Robust statistics according to the international guide ISO 13528
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		<ul> <li>SDPA (σ<sub>pt</sub>) obtained by history, calculation or according to legislation</li> </ul>
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		<ul> <li>Complete statistical reports: sample preparation and results by parameters</li> </ul>
		Personalized report comparing own results with the global
		results
		Personalized Assessment
	•	Qualified technical support: trained staff
		Tailored assistance to participants
		Consulting and manufacturing service according to customer
		needs



## **Promotions**

5% early-bird discount

Early-bird discount until December 25th, 2025. Participation in 2024 and 2025 is required

5% rounds increase discount

Increase in rounds compared to the registration carried out in 2025

25%

discount

scheme

3 Rounds same

10% matrix combination discount

Participation in two rounds belonging to the same matrix. Check the available combinations included in this promotion at the end of this catalogue

15% discount

2 Rounds same scheme

Participation in two rounds of the same scheme

Participation in three rounds of the same scheme

See conditions of these promotions on page 53 of this catalogue



## How to register in ielab's PTS



#### Access

Join our website (www.ielab.es) > CLIENT AREA



#### Registration

NEW CUSTOMERS: fill your profile through the 'Clients Registration' section and get your credentials (username and password).

REGISTERED CUSTOMERS: access your profile on the 'REGISTERED CLIENTS ACCESS' section with your usual credentials



#### Inscription

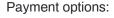
In the 'Registration' option within your profile, you will find a table with all the rounds and schemes offered, where you can 'Add' or 'Remove' your choice and make your inscription



#### Confirmation

Click on 'Accept' to get an assessment of selection, as 'Pre-registration / quotation'.

Formalize the order by pressing 'Confirm'.



- · By bank transfer once the invoice is issued
- · By credit card at the time of registration



#### Checking

You will receive an email with a summary of the purchases. Otherwise, contact us at comercial@ielab.es.



# Proficiency Testing Schemes ielab 2026



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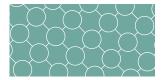
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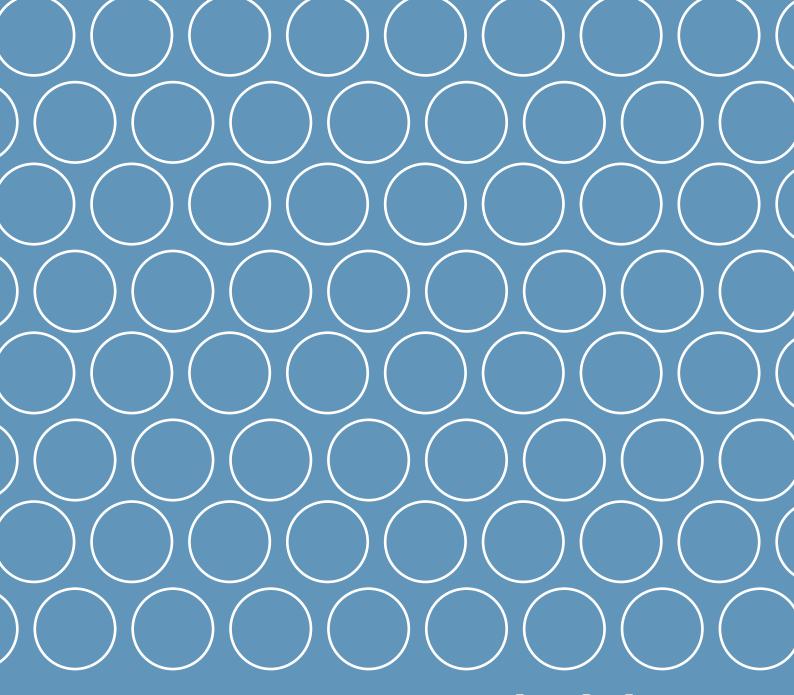
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# Drinking Water

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# **Drinking Water**

In Europe, the legal frame that regulates the quality of water intended for human consumption is based on the new European Directive (EU) 2020/2184, December 16<sup>th</sup>, 2020.

For the purposes of this Directive 'water intended for human consumption' means

a) all water, either in its original state or after treatment, intended for drinking, cooking, food preparation or other domestic purposes in both public and private premises, regardless of its origin and whether it is supplied from a distribution network, supplied from a tanker or put into bottles or containers, including spring waters;

**b)** all water used in any food business for the manufacture, processing, preservation or marketing of products or substances intended for human consumption.

Our Proficiency Testing Schemes for Drinking Water include the main physical-chemical indicators and microbiological pathogens used to assess the quality of this type of water.



### Drinking Water: Physical-chemical A

[ref. 990001]



Round I	Round II	Round III
Week 8 <b>16<sup>th</sup> February 2026</b>	Week 21 <b>18<sup>th</sup> Mαy 2026</b>	Week 39 21st September 2026
Aluminium	Arsenic	Calcium
Antimony	Chlorides Colour	Chromium Combined chlorine
Antimony Bicarbonates	Iron	Combined chlorine
Boron	Mercury	Fluorides
Cadmium	Nitrites	Free residual chlorine
Conductivity at 20°C	Oxidability	Lead
Langelier index at 20°C	pH	Nickel
Magnesium	Potassium	Sulphates
Manganese	Selenium	Total chlorine
Nitrates	Zinc	Turbidity
Sodium		
Uranium		

Metals will be determined as 'total metals'

## Drinking Water: Physical-chemical B

[ref. 990002]





Round I	Round II	Round III
Week 8 16 <sup>th</sup> February 2026	Week 21 <b>18<sup>th</sup> May 2026</b>	Week 39 <b>21<sup>st</sup> September 2026</b>
Aldrin Aluminium Ametryn Ammonium Antimony Atrazine Benzo-a-pyrene Benzo-b-fluoranthene Bicarbonates Boron Bromodichlorometane Cadmium Conductivity at 20°C Dibromochloromethane 1,2-Dichloroethane Dieldrin Langelier index at 20°C Magnesium Manganese Nitrates Sodium 1,1,1-Trichloroethane Uranium	Alfa-endosulfan Arsenic Benzene Benzo-g,h,i-perylene Bromoform Chloroform Chlorides Colour Heptachlor Iron Indeno-1,2,3-c,d-pyrene Mercury Nitrites Oxidability pH Potassium Propazine Selenium Terbutylazine Toluene Vinyl chloride Zinc	Benzo-k-fluoranthene Beta-endosulfan Calcium Chromium Combined chlorine Copper 4,4'-DDE Ethylbenzene Fluoranthene Fluorides Free residual chlorine Heptachlor epoxide Lead Nickel o-Xylene Simazine Sulphates Tetrachloroethene Total chlorine Trichloroethene Turbidity

Metals will be determined as 'total metals'



## Drinking Water: Physical-chemical C







Round I	Round II
Week 12 <b>16<sup>th</sup> March 2026</b>	Week 38 14 <sup>th</sup> September 2026
Barium Beryllium Bicarbonates Calcium Dry residue Hardness Vanadium	Anionic surfactants Cobalt Kjeldahl nitrogen Magnesium Orthophosphates Silica Silver Total cyanides Total phosphorus

Metals will be determined as 'total metals'

## Drinking Water: Physical-chemical D





[ref. 992981]

Round I	Round II
Week 10 <b>2</b> <sup>nd</sup> <b>March 2026</b>	Week 43 19 <sup>th</sup> October 2026
Acrylamide* Bisphenol A* Bromates* Bromides* Bromoacetic acid* Chloroacetic acid* Dibromoacetic acid* Dichloroacetic acid+ Sum of Haloacetic acids (HAA)*	Chlorates* Chlorites* 2,4-D Diuron Geosmin* Isoproturon* 2-Methylisoborneol (MIB)* MCPA Microcystines LR*
Total organic carbon (TOC)*  Trichloroacetic acid*	Perfluorooctanesulfonic acid (PFOS)* Perfluorooctanoic acid (PFOA)* Sum of PFAS*

<sup>\*</sup> Parameter not included in the scope of accreditation



## Drinking Water: Microbiology

[ref. 990019]



Round I	Round II	Round III
Week 6 <b>2<sup>nd</sup> February 2026</b>	Week 20 <b>11<sup>th</sup> Μαy 2026</b>	Week 38 14 <sup>th</sup> September 2026
Clostridium perfringens Culturable microorganisms at 22°C Culturable microorganisms at 30°C Culturable microorganisms at 36°C Escherichia coli Faecal coliforms Intestinal enterococci Salmonella spp. Total coliforms	Clostridium perfringens Culturable microorganisms at 22°C Culturable microorganisms at 36°C Pseudomonas aeruginosa Escherichia coli Faecal coliforms Faecal estreptococci Intestinal enterococci Total coliforms	Clostridium perfringens Culturable microorganisms at 22°C Culturable microorganisms at 36°C Escherichia coli Intestinal enterococci Pseudomonas aeruginosa Staphylococcus aureus Sulphite-reducing clostridia Total coliforms

### **Bottled Water: Microbiology**



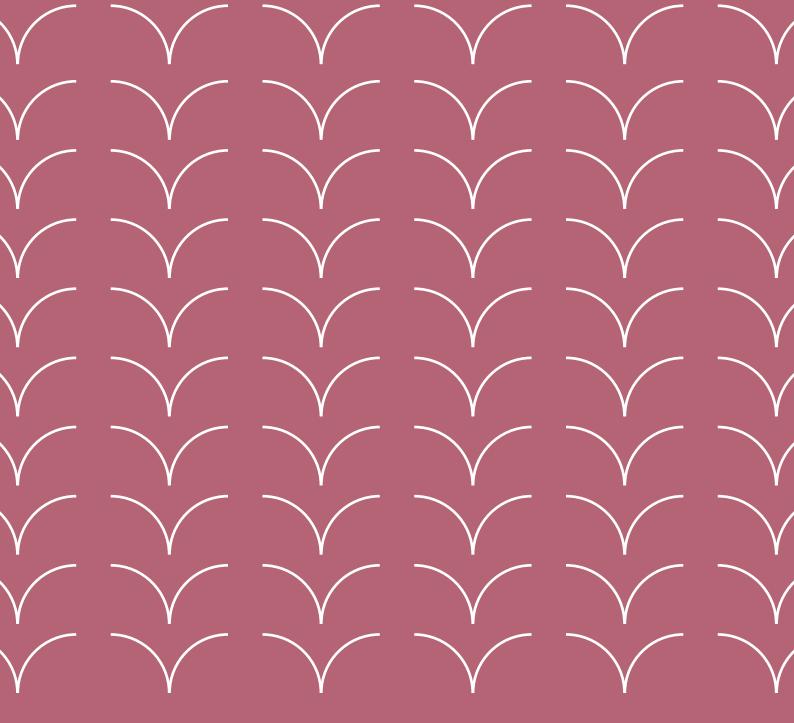


[ref. 990037]

#### Round I

Week 22 25<sup>th</sup> May 2026

Clostridium perfringens
Culturable microorganisms at 22°C
Culturable microorganisms at 36°C
Escherichia coli
Intestinal enterococci
Pseudomonas aeruginosa
Sulphite-reducing clostridia
Total coliforms



# Continental Water

Continental Water: Microbiology | page 19 Swimming Pool Water: Microbiology | page 19



# **Continental Water**

Within this group, it is possible to differentiate between treated and untreated continental water.

Among the latter are surface water (rivers, lakes, reservoirs...) and groundwater or catchment for human consumption located on land. Generally, the tests carried out in this type of matrix have as their ultimate objective the establishment of a framework for the protection of this type of water, as established by the Water Framework Directive (Law 62/2003, December, 30th 2000).

Within the treated continental water, the water of swimming pools, cooling towers, evaporative condensers, or those for pharmaceutical use are included.

The technical-sanitary quality of swimming pools is regulated by different regulations in different countries, remaining in Spain under the protection of RD 742/2013. Our scheme includes the main indicators and microbiological pathogens used to control the quality of swimming pool water.



### Continental Water: Microbiology [ref. 990022]





Round I	Round II
Week 9 <b>23</b> <sup>rd</sup> <b>February 2026</b>	Week 41 5 <sup>th</sup> October 2026
Escherichia coli Faecal coliforms Intestinal enterococci Pseudomonas aeruginosa Salmonella spp. Staphylococcus aureus Total coliforms	Escherichia coli Faecal coliforms Intestinal enterococci Pseudomonas aeruginosa Salmonella spp. Staphylococcus aureus Total coliforms

## Swimming Pool Water: Microbiology



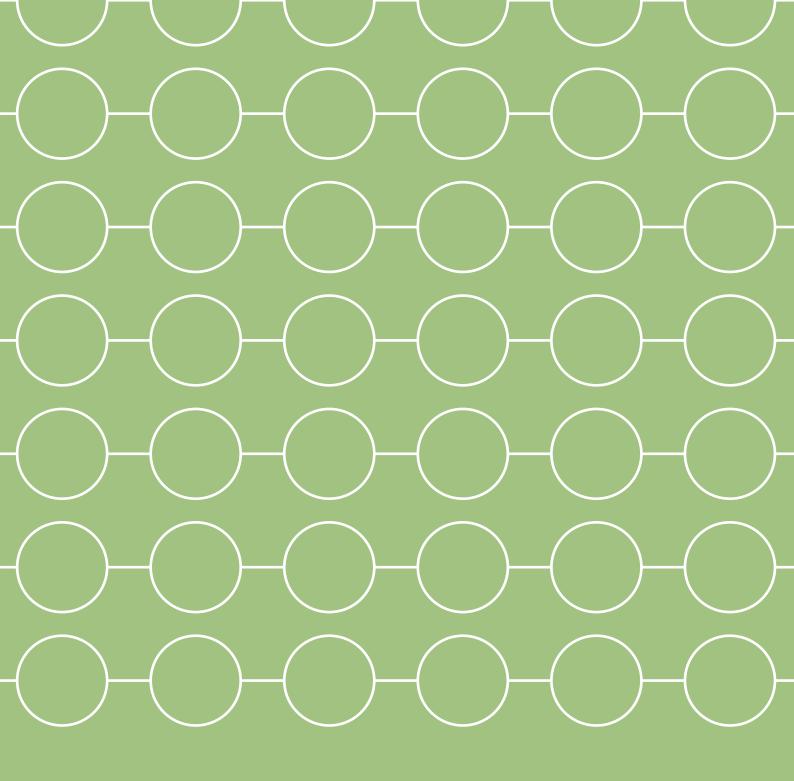


[ref. 990038]

	Week	24
th	June	2026

Round I

Escherichia coli Faecal coliforms Faecal estreptococci Pseudomonas aeruginosa Staphylococcus aureus Total coliforms



# Wastewater

Wastewater: Physical-chemical | page 22 Wastewater: Microbiology | page 22

Reclaimed Water | page 22



## Wastewater

Wastewater is water of variable composition from many sources as domestic, municipal, industrial or agricultural, and for that reason it has been degraded or altered in its original quality.

All of them are usually collected in a collecting system and sent through a terrestrial emissary to a WWTP (Wastewater Treatment Plant). The aforementioned Directive 91/271/CEE establishes the parameters, limits or the reduction level that the treatment process must achieve.

In discharge authorizations (either to sanitation systems or to public domain) the parameters and limits of application are defined, depending on the raw materials, production process and quality requirements of the receiving environment. It will take into account compliance with the limits for priority and preferential substances in Directive 2008/105/EC. These parameters include mainly organic substances, cyanides, fluorides and metals.

According to the normative which establishes the legal framework for the reuse of treated water, reclaimed water is defined as: 'The treated wastewater that has undergone a treatment process additional or complementary that allows to achieve the quality for their intended use'. This legislation establishes permitted uses, the frequency and quality criteria of this type of wastewater.

### Wastewater: Physical-chemical [ref. 990004]







Round I	Round II	Round III
Week 6 <b>2</b> <sup>nd</sup> <b>February 2026</b>	Week 22 <b>25<sup>th</sup> May 2026</b>	Week 41 5 <sup>th</sup> October 2026
Aluminium Ammonium Biological oxygen demand (BO <sub>5</sub> D) Chemical oxygen demand (COD) Chlorides Chromium Copper Fluorides Nickel Nitrates Selenium Suspended solids	Anionic surfactants Antimony Biological oxygen demand (BO <sub>5</sub> D) Cadmium Chemical oxygen demand (COD) Chromium VI Cobalt Manganese Orthophosphates Suspended solids Total organic carbon (TOC) Total phosphorus	Arsenic Biological oxygen demand (BO <sub>5</sub> D) Boron Chemical oxygen demand (COD) Conductivity at 20°C Conductivity at 25°C Iron Kjeldahl nitrogen Lead pH Suspended solids Thallium
Toxicity	Zinc	Tin Total nitrogen

Metals will be determined as 'total metals'

## Wastewater: Microbiology





[ref. 990014]

Round I	Round II
Week 8 <b>16</b> <sup>th</sup> <b>February 2026</b>	Week 42 13 <sup>th</sup> October 2026
Clostridium perfringens Escherichia coli Faecal coliforms Intestinal enterococci Salmonella spp. Total coliforms	Clostridium perfringens Escherichia coli Faecal coliforms Intestinal enterococci Salmonella spp. Total coliforms

### Reclaimed Water

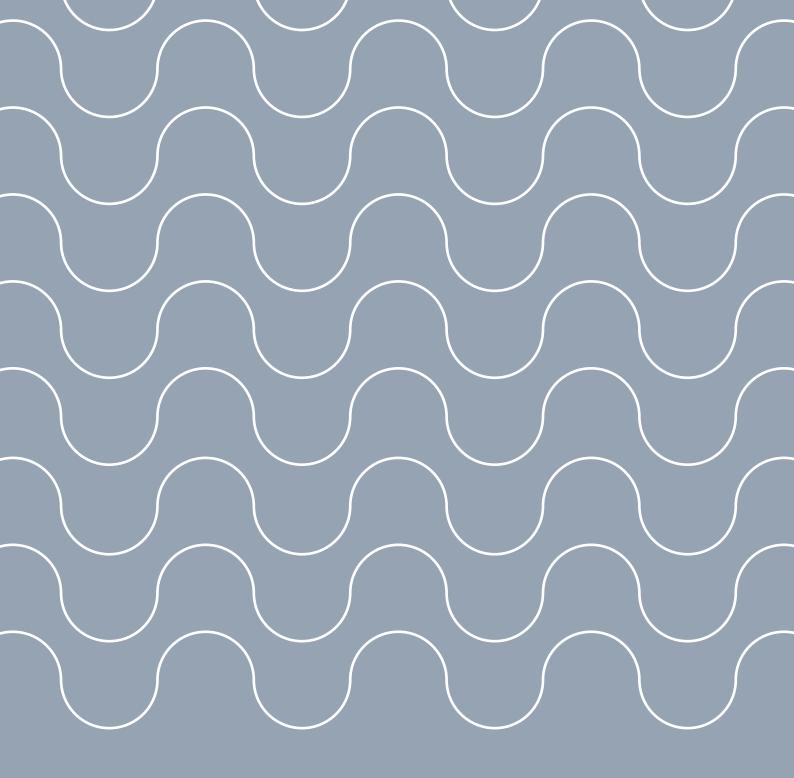




[ref. 990005]

Round I	Round II
Week 11 9 <sup>th</sup> March 2026	Week 44 26 <sup>nd</sup> October 2026
Boron Escherichia coli Intestinal nematodes Legionella pneumophila Legionella spp. Suspended solids Total phosphorus Turbidity	Cadmium Escherichia coli Intestinal nematodes Legionella pneumophila Legionella spp. Nitrates SAR (Sodium Adsorption Ratio) Total nitrogen

Metals will be determined as 'total metals'



# Sea Water

Sea Water | page 25



# Sea Water

Sea water is marine water, with a wide variety of minerals that confers a high saline percentage (between 35 and 38‰).

The sea water control is especially important in bathing areas. The Directive 2006/7/EC, February 15<sup>th</sup>, 2006 concerning the quality management of bathing water, collects the scientific and technical specifications and enables a more consistent legal framework both with the needs and the advances and the progress in recent

years regarding bathing waters. At the national level, RD 1341/2007 regulates this type of water.

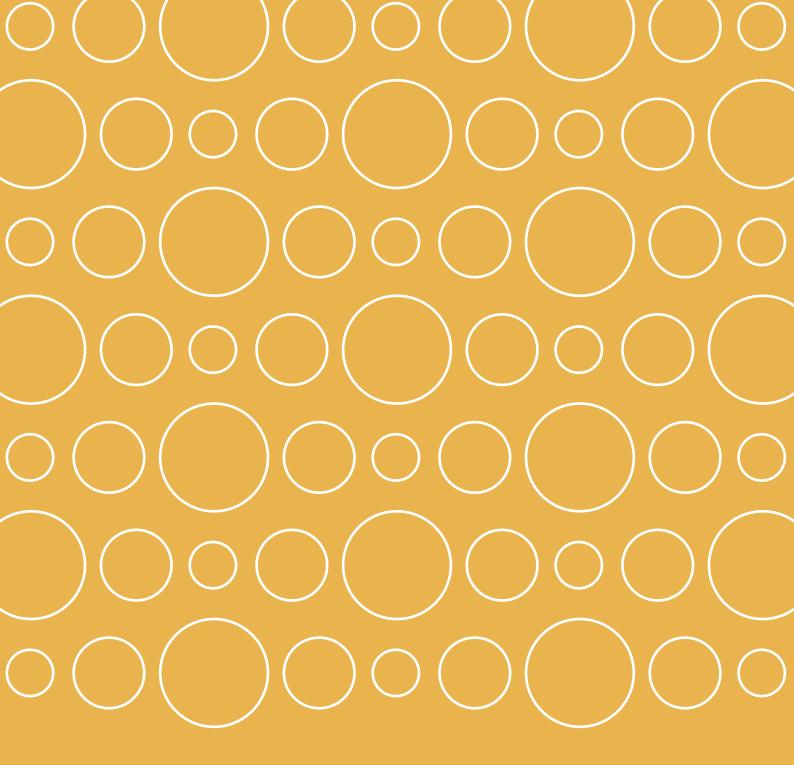
There are also various international networks focused on the Control and Quality Monitoring of Coastal Water whose main goal is to have an intervention tool, in order to provide information on the evolution of water and aquatic ecosystems quality by using of biological, hydromorphological and physicalchemical indicators.





Round I	Round II
Week 23 1 <sup>st</sup> June 2026	Week 37 7 <sup>th</sup> September 2026
Ammonium	Conductivity at 20°C
Arsenic	Escherichia coli
Cadmium	Intestinal enterococci
Escherichia coli	Mercury
Intestinal enterococci	Nickel
Orthophosphates	Nitrates
рН	рН
Salinity	Lead
Total coliforms	Total coliforms
Turbidity	Turbidity

Metals will be determined as 'total metals'



# Atmospheric Pollution

Stack Emissions: Physical-chemical | page 28



# Atmospheric Pollution

Industrial combustion and other kind of processes are susceptible to produce various contaminants which have been demonstrated to be or could be harmful to health and the environment. Control of these emissions permits to manage its environmental impact, demonstrating compliance with established legislative limits and avoiding penalties and adverse publicity.

European legislation (Directive 96/61/EC and 2008/1/EC version) states that emissions of static points as chimneys must be controlled so as to prevent or reduce such emissions and analytical controls are intended to control these emissions.

The material used is similar to that usually found in laboratories for such tests and consists of two types of supports, filters and impinger solutions. In the former, all the possible contaminations related to particles are studied and in the impinger solutions those pollutants in gaseous state are collected. The preparation and analysis of the established parameters are based on international regulations that allow rounds to be offered according to the needs of the laboratories (UNE-EN 12341: 2015, UNE-EN 13284-1: 2018 and UNE-EN 14902: 2006).



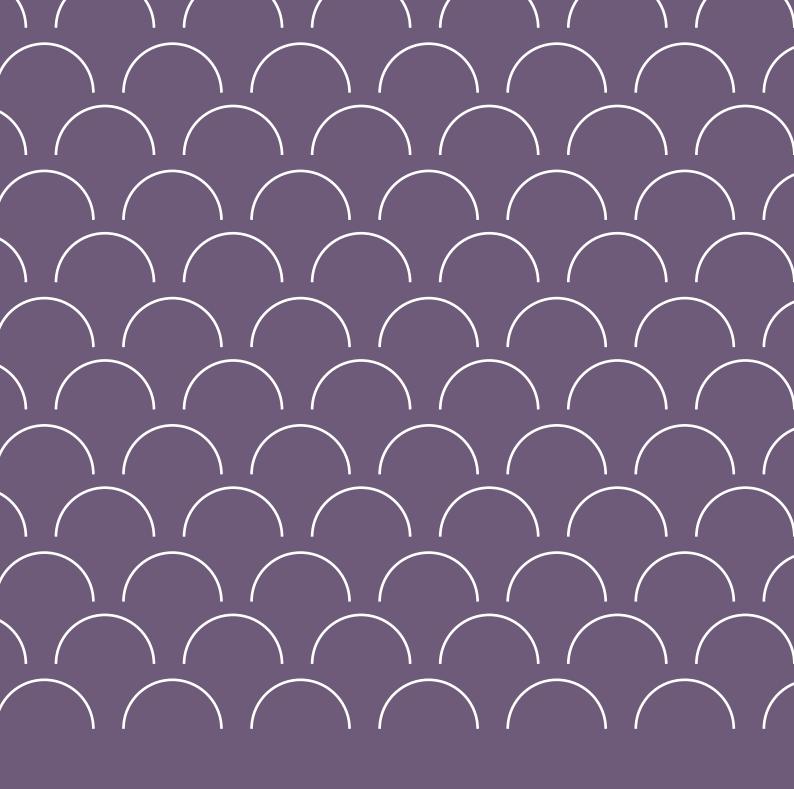
# Stack Emissions: Physical-chemical [ref. 990008]





Round I	Round II	Round III
Week 9 <b>23<sup>rd</sup> February 2026</b>	Week 18 <b>27<sup>th</sup> April 2026</b>	Week 40 <b>28<sup>th</sup> September 2026</b>
Filter:	Filter:	Filter:
Arsenic	Antimony	Copper
Cobalt	Cadmium	Lead
Manganese	Chromium	Selenium
Nickel	Mercury	Thallium
Vanadium	Tin	Zinc
Immission filters:		Immission filters:
Arsenic		Arsenic
Cadmium		Cadmium
Lead		Lead
Nickel		Nickel
Impinger solution:	Impinger solution:	Impinger solution:
Antimony	Chromium	Cobalt
Arsenic	Formaldehyde*	Nickel
Cadmium	Hydrochloric acid (HCI)	Sulphur dioxide (SO₂)
Copper	Lead	Thallium
Hydrofluoric acid (HF)	Manganese Vanadium	Zinc

<sup>\*</sup> Parameter not included in the scope of accreditation



# Solids

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# Solids

Sludges and soils, which count with completely different physical-chemical characteristics, are included in this group of schemes.

A sludge, also called mud, is defined as a semisolid residue which is produced, decanted or settled during a water treatment. They are generated in the septic tank of houses, shopping malls, offices or industries, or produced in a water treatment plant, as well as control units of atmospheric emissions.

Asoil is the uppermost layer of Earth's crust, which results of the decomposition of rocks by sudden temperature

changes and by the action of the water, wind and living beings. The chemical composition and physical structure of the soil at a certain location are determined by the type of geological material that originates, by the vegetal cover, by the time that weathering has acted, by topography and by artificial changes resulting from human activities.

The study of physical-chemical and microbiological parameters in this matrix allows evaluating its quality, conservation and proper management.



### Soils: Physical-chemical [ref. 990017]



Round I		
Week 42 13 <sup>th</sup> October 2026		
Arsenic Cadmium Calcium Chromium Conductivity at 20°C Copper Iron Lead Magnesium Manganese Mercury Nickel pH Potassium Sodium Total phosphorus Zinc		

Metals will be determined as 'total metals'

### Sludges: Physical-chemical [ref. 990013]





Round I	Round II
Week 13 <b>23</b> <sup>rd</sup> <b>March 2026</b>	Week 37 <b>7</b> <sup>th</sup> <b>September 2026</b>
Arsenic Cadmium Chromium Copper Iron Kjeldahl nitrogen Lead Manganese Mercury	Aluminium Cadmium Chromium Conductivity at 20°C Copper Lead Mercury Nickel Total organic matter
Nickel pH Zinc	Total phosphorus Zinc

Metals will be determined as 'total metals'



### Sludges: Microbiology [ref. 990027]





#### Round I

Week 21 18th May 2026

Clostridium perfringens Escherichia coli Faecal coliforms Intestinal enterococci Salmonella spp. Total coliforms

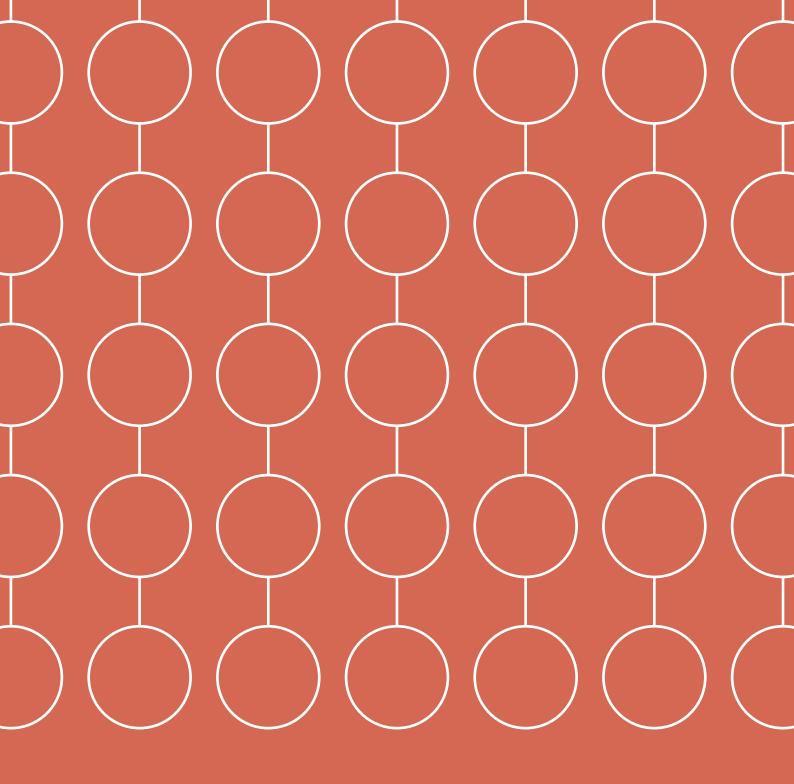
### Solids in Wastewater [ref. 990016]





Round I	Round II
Week 7 9 <sup>th</sup> February 2026	Week 19 <b>4</b> <sup>th</sup> <b>May 2026</b>
Dissolved solids at 105°C* Fixed suspended solids* Fixed total solids* Settleable solids* Suspended solids Total solids at 105°C* Volatile suspended solids* Volatile total solids*	Dissolved solids at 105°C* Fixed suspended solids* Fixed total solids* Settleable solids* Suspended solids Total solids at 105°C* Volatile suspended solids* Volatile total solids*

<sup>\*</sup> Parameter not included in the scope of accreditation



# Legionella

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Legionella: PCR | page 35

Legionella: Biofilm | page 35



# Legionella

Of all the environmental pathogens, *Legionella* and particularly *Legionella pneumophila* species is one of the most studied organisms due to its impact in large communities, and therefore its importance for public health and the enormous social and economic impact.

In all current laws and regulations on legionellosis prevention, *Legionella* testing is contemplated as one of the most important preventive methods, establishing culture isolation based on the ISO 11731 standard as the reference method. ielab's *Legionella*: Culture scheme simulates natural samples to be tested by the method implemented in the laboratory, to assess the analytical performance of the laboratory and the recovery rate of the used method.

However, culture isolation presents different drawbacks such as time-to-results that can be up to 10-12 days.

Due to the need in many cases for rapid results, alternative methods such as those based on nucleic acid amplification (qPCR), have been described as valid and very useful tools for the detection of *Legionella*.

Spanish legislation 487/2022 becomes the new legislative cornerstone in relation to the prevention and control of this bacterium, gathering the main technical advances and covering aspects not included in the legislation until now.

In the Legionella: PCR scheme, samples contain inactivated cells that allow the assessment of both the efficiency and performance in the analytical phases of concentration, DNA extraction / purification and amplification.



## Legionella: Culture





Round I	Round II	Round III
Week 10 <b>2</b> <sup>nd</sup> <b>March 2026</b>	Week 19 <b>4<sup>th</sup> May 2026</b>	Week 40 28 <sup>th</sup> September 2026
2 samples (A and B):	2 samples (A and B):	2 samples (A and B):
Sample A: Legionella pneumophila Legionella spp.	Sample A: Legionella pneumophila Legionella spp.	Sample A: Legionella pneumophila Legionella spp.
Sample B: Legionella pneumophila Legionella spp.	Sample B: Culturable microorganisms at 22°C Culturable microorganisms at 36°C Legionella pneumophila Legionella spp.	Sample B: Legionella pneumophila Legionella spp.

Samples B will include natural matrix

### Legionella: PCR





[ref. 990012]

#### Round I

Week 10 2<sup>nd</sup> March 2026

3 samples (A, B and C): Legionella pneumophila

Evaluation:

Legionella spp.

Concentration, extraction/purification and amplification of DNA

### Legionella: Biofilm

[ref. 993001]

#### Round I

Week 25 15<sup>th</sup> June 2026

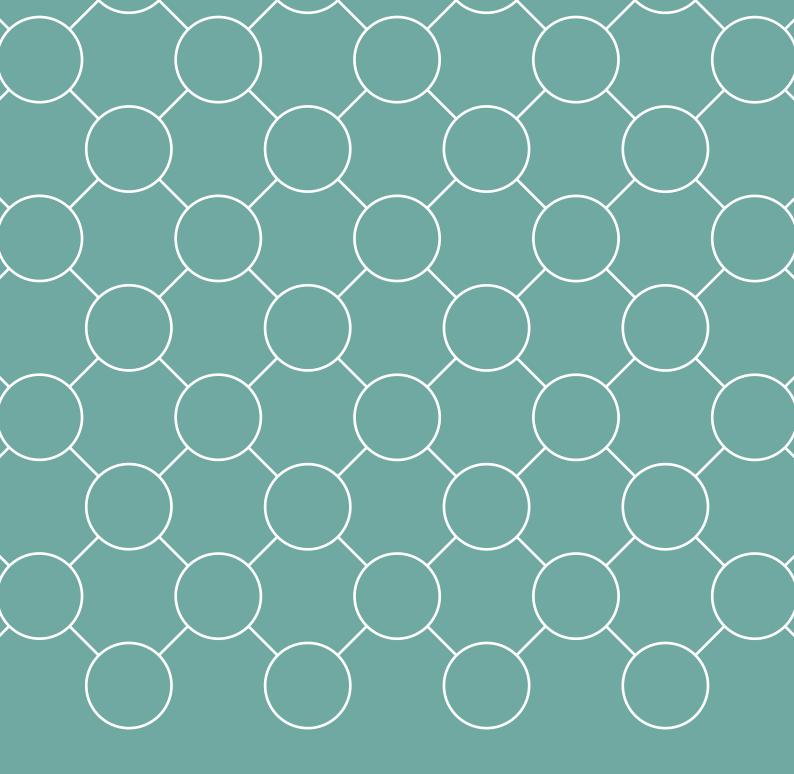
3 samples (A, B and C):

Legionella pneumophila Legionella spp.

Evaluation:

Detection and identification

Round not included in the scope of accreditation



# Bacteriophages

Bacteriophages | page 38



## Bacteriophages

Historically, microbiological control has been mainly done through bacterial indicators, but currently viral indicators are trending in quality control of water, biosolids and food. The new European Directive (EU) 2020/2184 December 16th, 2020 on the quality of water intended for human consumption includes the somatic coliphage parameter as an indicator to verify the effectiveness of treatment processes against microbiological risks.

Bacteriophages as viral indicators provide additional advantages to bacterial indicators, since they are present in the environment in a similar amount to bacterial indicators, usually persist longer and provide more information on viral pathogens which are not properly represented by studying only bacterial indicators.

Somatic coliphages are bacteriophages of enteric origin that can infect *Escherichia coli* through cell surface receptors.

F-specific coliphages, also named sexual coliphages or male-specific bacteriophages, infect bacteria through the sex pili.

The presence of both somatic and/or F-specific coliphages in water samples usually indicates pollution by human or animal faeces, or by sewage containing these excreta. Therefore, these coliphages provide a simple and relatively rapid tool for the detection of faecal pollution, and their resistance in water and food tends to resemble that of human enteric virus more closely than faecal bacteria, commonly used as water or food quality indicators.

Both somatic and F-specific coliphages are included in water, wastewater, biosolids and food guidelines and regulations complementing the use of other bacterial indicators.

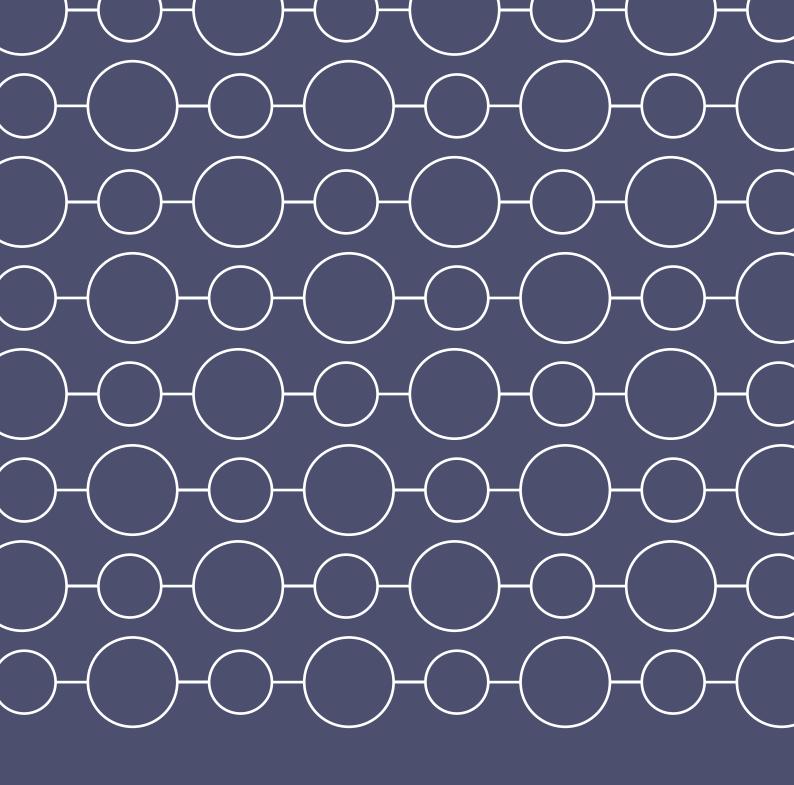


## Bacteriophages [ref. 992512]





Round I	Round II	Round III
Week 7	Week 18	Week 39
9 <sup>th</sup> February 2026	<b>27<sup>th</sup> April 2026</b>	<b>21</b> st <b>September 2026</b>
F-specific bacteriophages	F-specific bacteriophages	F-specific bacteriophages
Somatic bacteriophages	Somatic bacteriophages	Somatic bacteriophages
Evaluation: Concentration, elution and culture	Evaluation: Culture	Evaluation: Concentration, elution and culture
Matrix:	Matrix:	Matrix:
Drinking water - Outlet water	Wastewater and reclaimed water	Drinking water - Inlet water



## SARS-CoV-2

SARS-CoV-2 | page 41



## SARS-CoV-2

With the global pandemic of COVID-19, the performance of detection tests is being prioritized not only in patients but also in the environment that surrounds us.

The European Commission, in its Recommendation (EU) 2021/472, urges member states to establish a systematic surveillance for SARS-CoV-2 virus and its variants in EU wastewater as a complementary tool for data collection and management of the pandemic. It also establishes that to assure that sampling and analysis methods are comparable and reliable, Member States must ensure that laboratories participate in appropriate proficiency tests organized by accredited providers.

ielab organized in October 2020 a Proficiency Testing Scheme for the detection of SARS-CoV-2 using RT-

qPCR, and in May 2021 it became the first national accredited provider of proficiency testing schemes for the detection and quantification of SARS-CoV-2 in wastewater.

As for the samples to be tested, they may be of synthetic or natural origin and will contain virus genetic material of SARSCoV-2, which will allow to evaluate the virus detection process after the concentration, extraction and amplification phases. The results can be reported both qualitatively (Detected / Not Detected) and quantitatively. The fields of application are: clinical/sanitary, environmental and surfaces.





#### Round I

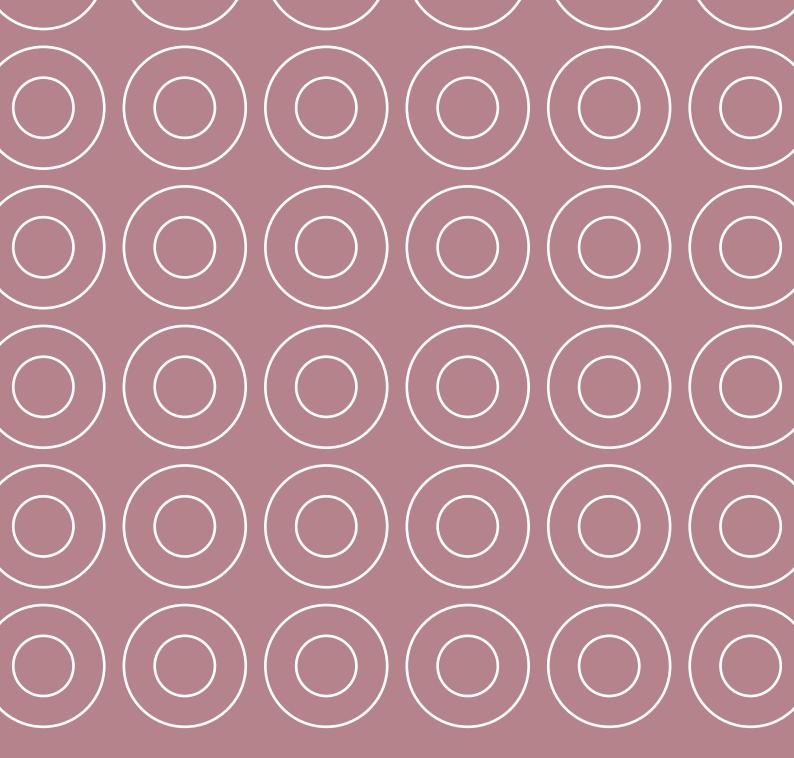
Week 13 23<sup>rd</sup> March 2026

2 Samples (A and B): SARS-CoV-2

**Evaluation:** 

Sample A: Extraction and amplification Sample B: Concentration, extraction and

amplification



# Cosmetics

Cosmetics: Microbiology | page 44



## Cosmetics

The analyses on cosmetics are part of quality control and aim to verify and conform materials or products against the specifications established by the current legislation. Microbiological analysis helps to keep under control the proliferation of microorganisms that can cause contamination, poisoning and disease.

ISO 22716 is aimed at the cosmetic industry, and provides guidelines for the production, control, storage and dispatch of cosmetic products and ingredients.

The participation of cosmetic companies in our scheme will provide them a valuable tool for their laboratory. It will allow them to ensure the quality of the results they issue through independent assessment, and will help them to better comply with their ISO 22716 quality assurance system (GMPs). In addition, their participation will facilitate them performance aspects and they will be able to demonstrate their technical competence versus clients and public bodies.

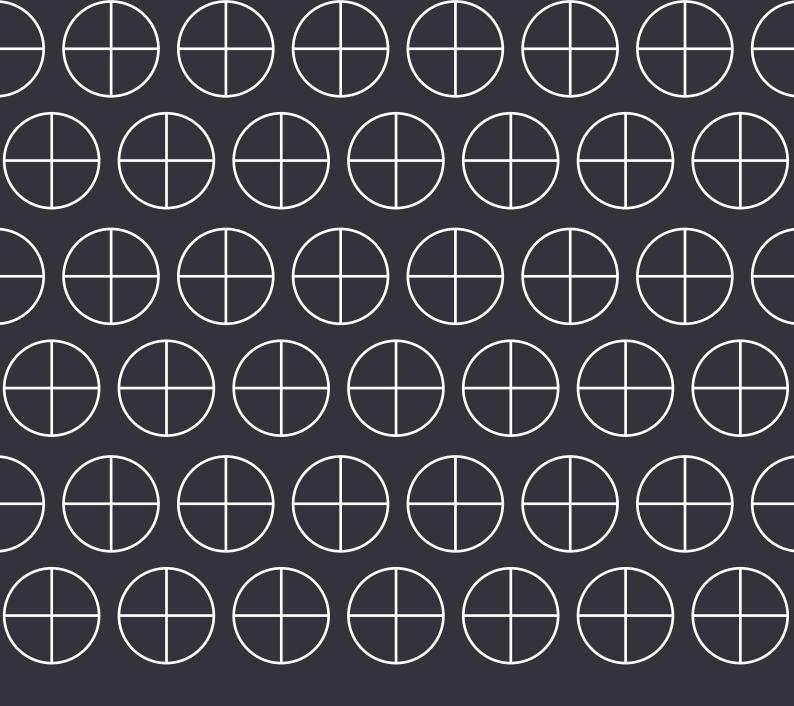


## Cosmetics: Microbiology

[ref. 992826]

Round I	Round II
Week 12 <b>16<sup>st</sup> March 2026</b>	Week 43 19 <sup>th</sup> October 2026
Quantitative parameters: Culturable microorganisms at 22°C Culturable microorganisms at 35°C Molds and yeasts	Quantitative parameters: Culturable microorganisms at 22°C Culturable microorganisms at 35°C Molds and yeasts
Qualitative parameters: Burkholderia cepacea complex (Bcc) Candida albicans Coagulase positive staphylococci Escherichia coli Other coliforms different to E. coli Pseudomonas aeruginosa	Qualitative parameters: Burkholderia cepacea complex (Bcc) Candida albicans Coagulase positive staphylococci Escherichia coli Other coliforms different to E. coli Pseudomonas aeruginosa

Rounds not included in the scope of accreditation Samples will include real matrices



# in situ Analysis and Sampling

in situ Analysis and Sampling: Physical-chemical | page 47 Indoor Air Quality | page 47



# in situ Analysis and Sampling

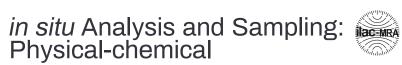
These are face-to-face schemes in which the participants attend to the location established by the organization to carry out several measurements *in situ*. Each participant can use the method and equipment considered as appropriate, with no limitation by the side of the Organizer.

In the *in situ* Analysis and Sampling: Physical-chemical scheme, *in situ* measurements are made for the parameters: conductivity, pH, dissolved oxygen, temperature and flow in three different matrices (wastewater, continental water and sea water). Yearly, 2 rounds are offered, one located in Alicante and another in Madrid.

Only for the round located in Alicante, in addition to the *in situ* analyses, a Sampling testing of physical-chemical parameters is carried out in the continental water and wastewater matrices. All samples are collected by the Organizer and subsequently analysed by a single reference laboratory.

The technical and statistical analysis is carried out according to the criteria established by the IUPAC and the 'Selection, Use and Interpretation of Proficiency Testing (PT) Schemes by Laboratories (2021)' guide, so as to ensure the homogeneity and stability of the sample during the test.

ielab also makes the Indoor Air Quality (IAQ) scheme available to laboratories, as an external tool for quality control of their measurements, and as a synonymous of guarantee of their correct performance and technical competence. The face-to-face format of this PTS eliminates any risk of contamination of the client's own facilities. This scheme includes *in situ* physical-chemical measurements and sampling for microbiological parameters on air and surfaces. In this case, each laboratory will carry out the analysis of its samples and will send the results to the Organization.







[ref. 990021 | 990023]

Alicante	Madrid
Week 19 <b>7<sup>th</sup> Mαy 2026</b>	Week 43 22 <sup>nd</sup> October 2026
Continental water: Conductivity at 20°C Dissolved oxigen pH Temperature	Continental water: Conductivity at 20°C Dissolved oxigen pH Temperature
Wastewater: Conductivity at 20°C Conductivity at 25°C Discharge* Dissolved oxigen pH Temperature	Wastewater: Conductivity at 20°C Conductivity at 25°C Discharge* Dissolved oxigen pH Temperature
Sea water: Conductivity at 25°C Dissolved oxigen pH Temperature	
Sampling: Physical-chemical*	

<sup>\*</sup> Parameters and activities not included in the scope of accreditation

## Indoor Air Quality

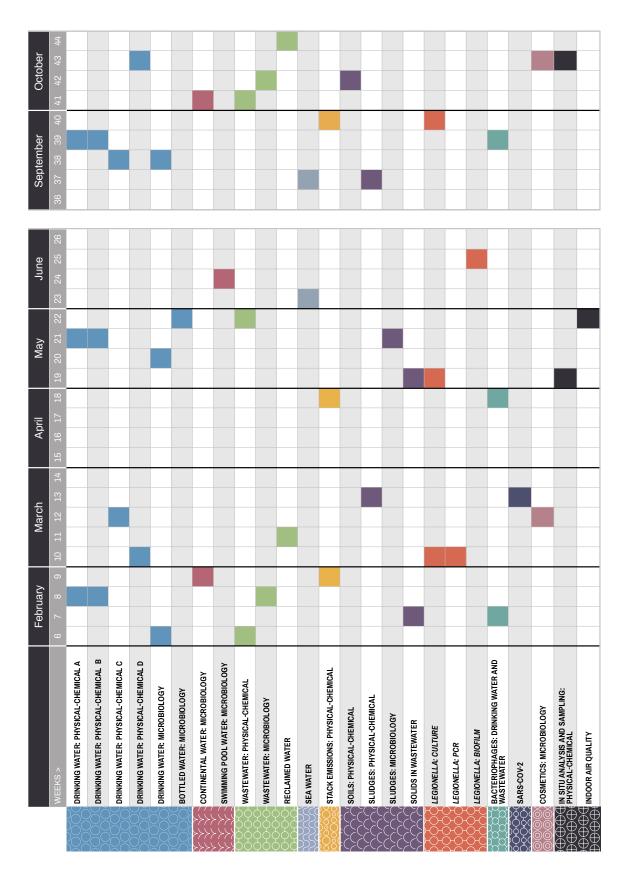
[ref. 992827]

Barcelona
Week 22 <b>27<sup>th</sup> May 2026</b>
Physical-chemicals: 0.5 µm particle count 5 µm particle count CO emission CO <sub>2</sub> emission Suspended particles by gravimetry Thermo-hygrometric conditions
Air: Molds and yeasts Total microorganisms at 22°C Total microorganisms at 36°C
Surfaces: Molds and yeasts Total microorganisms at 22°C Total microorganisms at 36°C

Round not included in the scope of accreditation



ielab Proficiency Testing Schemes: 2026 schedule





# General conditions about the participation in lelab's Proficiency Testing Schemes

## Registration

The easiest and safest way to register in our Proficiency Testing Schemes (PTS) is through **ielab**'s website (www. ielab.es). By this way the confidentiality and agility on the information and data transmission is assured. Alternatively, you can also register by contacting us by email (comercial@ielab.es).

The current prices can be consulted in the specific rates document and also when you make your registration through the website. The registration fee includes sample preparation, access to the website for data submission and for downloading results reports and any other document related to the rounds such as the certificate of participation. Any additional tax or fee will be added before the confirmation of the purchase order, whenever necessary.

The participating laboratory may request the cancellation of its participation in a round of the PTS, as long as it is properly notified to the organization with enough time prior to its completion.

By another hand, in case that the calendar, planning or any of the previously agreed terms cannot be fulfilled, the participants will be informed in writing with the adopted solutions. If the number of registrations for a PTS round does not reach the minimum required to carry it out, the organization may cancel or delay this round, refunding or replacing the registration to the participants

## Frequency of participation

The frequency of participation in the PTS depends on several specific factors related to the characteristics of each laboratory, as well as other aspects of quality control. The number of samples tested, and the risk associated with the tests are very important issues to be considered. Therefore, each laboratory should establish its own frequency of participation.

Accreditation bodies often offer guidelines about frequency of participation, such as in the documents 'NT-03-Política de ENAC sobre intercomparaciones' and the guide 'Guía sobre la participación en programas de Intercomparaciones G-ENAC-14' or in EURACHEM Guide 'Selection, use and interpretation of Proficiency Testing Schemes'.

#### Confidentiality

To guarantee confidentiality, the participation codes of each laboratory are automatically assigned by the software at the time of registration. Each participant has a 4-digit code that can be changed and that allows them to identify their results in the round report. In this way, their identity is protected against the rest of the participants and from the organization itself.

The results and other technical information submitted by participants and related to the assays will be associated with the participation code in the results report. In the results report only this code is mentioned neither including the name or other information of the participant, nor the data included in the observations field of the results bulletin.



ielab is responsible for the management of all information obtained or created during the performance of PT activities directly or through a third party. If ielab was required by law to release confidential information, the client concerned shall be notified of the information released, unless prohibited by law.

It is recommended that the final participant be informed of possible import procedures and notify **ielab** any additional instruction or document required in their country regarding these procedures.

#### Payment

PTS payment can be made via:

#### **BANK TRANSFER:**

Bank: Banco Bilbao Vizcaya Argentaria, S.A. (BBVA)

Address: Plaza Antoni Maura, 6, 2ª PLANTA. Barcelona. Spain

Bank Account: 01823994050201548997

Swift: BBVAESMMXXX

IBAN: ES9101823994050201548997

#### **CREDIT CARD**

For other options, please contact to our email address comercial@ielab.es.

## Sample preparation and verification

**ielab** will prepare natural samples if possible. If any element or microorganism is not present in the natural sample, the appropriate analytes or microorganisms relevant to investigation will be added/spiked, or a synthetic sample will be prepared. This information is detailed in the round instructions and is available to customers upon request.

The corresponding homogeneity and stability studies of the samples will be performed according to IUPAC (International Union of Pure and Applied Chemistry) and to the ISO 13528 standard.

## Packaging and shipping of samples

Samples will be sent to participants by express courier according to the previously established calendar, being preferably sent on Monday.

The materials used in the PTS are packaged complying with the legal requirements regarding transport and under conditions that allow preserving their content. In general, most of the samples from **ielab**'s PTS are sent at room temperature. If any sample must be kept refrigerated after reception, it will be detailed in the round instructions document for each round.

Express courier systems are used, and the samples are accompanied by all transport documentation required by international regulations. However, in some countries, we recommend participants to obtain information in advance about the import documents or taxes that may be needed.

**ielab** declines the responsibility of the shipment status if it has been retained at the customs office of the destination country.

## Handling and storage of samples

Prior to sending the samples, **ielab** provides detailed instructions to the participants that clearly specify how each sample should be preserved and/or handled. **ielab** has designed and planned its rounds so that the handling of the samples is a quick and easy process. Sometimes, it is also included a workflow diagram in the instructions to make handling easier. This information is also available on our website.

The samples are preserved to maintain their optimal analytical properties under the usual shipping conditions and transport times. Stability tests are carried out simulating shipping conditions and during the established test period. In addition, there is a transport control in the samples of the microbiology rounds consisting on sending to one of the participants a duplicate of the samples to be tested, which are returned to the organization for verification.

For the microbiological rounds, the samples can begin to be analyzed even up to a week after being sent, although it is advisable to do it as soon as they are received.

For physical-chemical parameters, the recommended analysis period is extended until the results submission deadline. Nevertheless, if any parameter must be analyzed before this period, all the complementary information necessary to perform the analysis is specified in the instructions.

## Volumes and analytical methodology

The volume of sample sent by **ielab** is considered enough to analyze any parameter in triplicate according to the most commonly used methodologies.

It may happen that your laboratory requires more sample volume. In this case, **ielab** can provide you with an 'extra sample' under request for an additional charge. Contact by e-mail to comercial@ielab.es to know this rate.

As a PTS provider, **ielab** does neither requires nor recommends any method of analysis. One of the objectives of proficiency testing is to determine the effectiveness of a laboratory in terms of tests or measurements that are usually performed, so that participants can analyze PTS samples using the method they wish. It is important that the participants report the



method used and the technical specifications requested, since we often also assess the results based on the methods used.

Therefore, the participating laboratories will be able to analyse the samples according to their usual method, and for the parameters that interest them.

## Deadline and how to submit the results

Deadline of each round is detailed in the instructions provided and all details are also available on our website. Usually, the deadline to submit results is 3 weeks after samples are dispatched. Please consider that after the established deadline, results cannot be recorded in the website anymore.

To report results, you must access the private client area of our website www.ielab.es with your usual username and password, and select the 'Open Proficiency Tests/ Results submission' section from the menu. The results bulletin will open automatically. In case you are participating in several rounds in progress, a drop-down will appear where you must choose the desired round. After filling the bulletin, you must press the 'Save' button and check that you receive a confirmation email at the email address that appears in the database.

Once the results are saved, they will be available if you re-enter with your username and password. You can add or modify them as many times as you wish. If you make any changes, you should 'save' again, and you will receive a confirmation email again.

The results bulletin will be available for editing until the established deadline of the round. Once this period is expired, the bulletin of results will be blocked, and no modifications can be made. Alternatively, there are other options to submit results and you can acquire this service when you register by selecting ('Paper Management Service'). By submitting the results, the participant authorizes **ielab** to use those results for the commercialization of reference materials.

## **Expression of results**

The results reported should be expressed in the units indicated in the PT Schemes' round instructions for each parameter and following their guidelines. Decimal numbers must be typed according to the settings of each participant's computer, without using any symbol to separate thousands positions. In some cases, the instructions of each round indicate the maximum number of decimal places that should be used to express the results.

Each participant can analyze the parameters he/she considers. For any analysed parameter it is necessary to submit the number of replicates detailed in the round instructions, as well as any other requested information. Please follow carefully the detailed guidelines included in the instructions of each round.

## Statistical study

The technical and statistical study is carried out according to the IUPAC criteria and to the ISO 13528 Standard. The results are therefore subjected to a broad and robust statistical study to obtain the assigned value.

For each parameter, its consensus value, standard deviation and uncertainty is calculated (without outliers or statistically failed results). In addition, for added analytes, the known value and the uncertainty may be indicated in the report.

Each laboratory will be evaluated by means of the z score criteria, using the values of the applicable legislation as criteria for calculating the 'Standard Deviation for Proficiency Assessment (SDPA)'. If it does not exist, it will be calculated based on international standards, or using the Horwitz function modified by Thompson.

For microbiology, the SDPA will be obtained based on historical rounds results. The SDPA value can also be fixed by **ielab**.

The SDPA calculation criteria for each parameter is available to customers who request it and on our website.

#### Reports

The reports produced by **ielab** include detailed information on all aspects of the round and its results.

For each round, a detailed report is prepared that includes information on the design of the round, the preparation of the samples, homogeneity and stability, tables with the results of all the participants, the methods used (identified with the method number), the complete statistical study and graphs of distribution of results, and with the results of the evaluation of the participants, among others. Additionally, a personalized report is prepared for the comparison of results. At the request of the clients, additional reports can be prepared under agreed specifications, and will have an additional charge.

The reports of results are sent to the participants by email in pdf file and within 15 working days after the closing date of the round. There is the option to request reports printed. Check the current charges for this way of report shipment ('Paper Management Service').

If the number of results for a parameter does not reach the minimum required (10 available results to perform the statistical study), this parameter will be identified as 'out of scope of ENAC Accreditation' in the results report.

In case of doubt regarding any result or your evaluation in the round report, you can contact **ielab** by phone or email and we will assist you in a personalized way, studying your query to give you the answer that best suits the circumstances.



## ielab accredited provider

**ielab** is a company committed to quality and efficiency. The ISO 9001 certification of all our activities and the accreditation according to the ISO/IEC 17043 standard as a provider of PTS guarantee this commitment.

The accreditation document, as well as its scope (No. 2/PPI007), can be consulted on the **ielab** website (www.ielab. es) and on the ENAC website (www.enac.es).

#### Subcontracted activities

The activities related to the analytical processes for homogeneity and stability verification of the samples are subcontracted with a laboratory accredited under ISO 17025. Therefore, the requirements of ISO 17043 for PTS providers are fulfilled. The preparation of nematode samples is also subcontracted to a Public Entity with recognized experience in this field.

## Claims and appeals

**ielab** counts with a process addressed to facilitate the appeal of the participants against the assessment of their performance in a proficiency test, which is available to the participants. In case that a laboratory does not agree with the evaluation of its results, or with any other aspect of the services provided, it may request clarification or make a claim through the usual channels of contacting with **ielab**, preferably by email.

Likewise, **ielab** has a complaint management procedure in accordance with our quality system and which is available to our clients upon request.

## Confabulation, connivence and falsification of results

**ielab** pays special attention to avoid situations of collusion between participants and treats confidentially both the identity of the participants and their results. **ielab** neither publishes the names of the laboratories nor transfers any type of information from one participant to another, in order to minimize opportunities for connivance and falsification of results.

In the case that **ielab** had well-founded suspicions and evidence about the connivance or falsification of results, it will eliminate the results of the participants involved in the statistical study and these results will not be evaluated with a Z-score. **ielab** considers that the participants themselves are responsible for avoiding this type of situations of collusion, connivance and / or falsification of results.



# Conditions of the promotions

#### 5% early-bird discount

5% discount on the amount of all the rounds included in the order placed before December 25th, 2025. It is required to have participated in the 2024 and 2025 ielab rounds. Discount cumulative to other applicable promotions

#### 5% rounds increase discount

5% discount on the amount of all the rounds included in the order that exceeds the number of rounds contracted in 2025. Discount cumulative to other applicable promotions

#### 10% matrix combination discount

10% discount on the registration in rounds belonging to the same matrix according to the following options. Discount cumulative to other applicable promotions

If you register to:	And also to:
Drinking Water: Microbiology	Drinking Water: Physical-chemical A and/or Drinking Water: Physical-chemical B and/or Drinking Water: Physical-chemical C and/or Drinking Water: Physical-chemical D
Wastewater: Physical-chemical	Wastewater: Microbiology
Sludges: Physical-chemical	Sludges: Microbiology
Legionella: Culture	Legionella: PCR

#### 15% discount 2 rounds same scheme

15% discount on the amount of the 2 rounds of the same scheme. This discount will be applied directly to the registration when selecting 2 rounds of the same scheme. Discount cumulative to other applicable promotions, except for the 25% discount promotion for 3 rounds of the same scheme

#### 25% discount 3 rounds same scheme

25% discount on the amount of the 3 rounds of the same scheme. This discount will be applied directly to the registration when selecting 3 rounds of the same scheme. Discount cumulative to other applicable promotions, except for the 15% discount promotion for 2 rounds of the same scheme



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Ametryn: 14

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