# Substances (PFAS) Analysis

World leader in Testing for Life



Water Hygiene Testing

#### **PFAS** Analysis

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The **most comprehensive** PFAS analysis on the market

 20 years unrivalled experience in PFAS testing

> Fast turnaround times through dedicated PFAS facilities and teams

The lowest accredited quantification limit – futureproofing our testing regime to benefit your business

Our global insight, technical innovation and excellence accessible through your local Eurofins teams

#### What are **PFAS**?

Per- and Polyfluorinated Alkyl Substances (PFAS), such as PFOA and PFOS are man-made 'forever chemicals' that don't readily break down in the environment or our bodies.

They have been widely used since the 1940s to make industrial and consumer products which are water, oil and stain repellent. They are also temperature and chemical resistant, and have electrical insulating properties.

PFAS are found in carpets, clothing, cosmetics, non-stick pans, furniture and food packaging. They are also used in firefighting products, hydraulic fluids and semiconductors.

PFAS are water-soluble, so they can be detected in soil, drinking water and groundwater.

Drinking water is recognised as one of the primary sources of PFAS exposure.



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# What are the risks posed by PFAS?

As well as being omnipresent and accumulating in the environment, PFAS also accumulates up in our bodies. As such, Human biomonitoring has found a range of PFAS in human blood.

Research suggests that continuous exposure to PFAS may lead to long-term health effects.<sup>1</sup> PFAS have been linked to thyroid disease, increased cholesterol levels, liver disease and kidney and testicular cancer. They have also been associated with low birth weight and other health concerns for babies.

# **UK PFAS regulations & guidance\***

## 🛱 January 2021

#### The Drinking Water Inspectorate

(DWI) issued formal guidance on PFOS and PFOA levels for water utility companies to consider when fulfilling their statutory duties on drinking water safety.<sup>2</sup>

Any concentrations above **0.01µg/L** during sampling and monitoring need to be escalated by consulting local health professionals and undertaking rigorous water quality monitoring.

# 🛱 April 2023

The Health and Safety Executive (HSE), in collaboration with the Environment Agency (EA), published a Regulatory Management Options Analysis (RMOA) on PFAS.

This document assessed potential human health and environmental risks associated with PFAS and recommended steps for regulation under UK REACH (Registration Evaluations, Authorisation, and Restriction of Chemicals).

#### 🛱 August 2021

**The Environment Agency** (EA) expanded the PFAS Range to include more substances for monitoring, following a report by its Chief Scientist's Group.

It recognised that quantifying the scale and nature of PFAS in the environment is challenging because of the number of individual substances.<sup>3</sup>



\* Due to the ever-changing regulatory landscape, information displayed in this document may be subject to changes after the date of issue. Please check with our Eurofins experts or with the respective local Authorities for updates, prior to using these contents for your testing plan.



#### Water Hygiene Testing

# Who should test for PFAS?



#### Why test for PFAS with Eurofins?

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Choose from a suite of analytical testing packages to best suit your needs, combining accredited and non-accredited tests

We offer the lowest accredited quantification limit (LOQ) for PFOS in waters, ready for any new regulatory limits or guidance



Complement PFAS grab samples with our patented Sorbisense<sup>™</sup> technology

We use Advanced Total Oxidizable Precursors (TOP) Assay methods to expose underlying PFAS that can't be detected through standard methods



Our cutting-edge automation and sensitive LC/MS/MS technologies push LOD/LOQ boundaries



We test a wide range of matrices for 49 PFAS



We commit to the highest level of accuracy and precision



We ensure fastest turnaround times through dedicated PFAS laboratory space and teams with the capacity to analyse thousands of samples a month



Our state-of-the-art testing methods developed through over 20 years of experience and extensive academic collaboration give us the flexibility to adapt to the changing needs of PFAS analysis





### **PFAS** water matrix analytical test packages

#### Eurofins offers the most comprehensive PFAS testing analysis on the market.

Outlined below are our available packages. For a full breakdown of ISO 17025 accredited and non-accredited PFAS testing options, including determinands, CAS numbers, and LOQs, please get in touch.

Test code	Test package name & matrices tested
PLWFW	Suite PLWFW - PFAS in Water acc. to (EU) 2020/2184 (DWD) incl. PFAS11

Fresh bathing water, seashore bathing water, brackish water, clean water, drain water, drinking water, fish farm water, ground water, irrigation water, leachate, marine water, naturally occurring water, other clean water, other naturally occurring water, precipitation, raw water, fresh receiving water, salt receiving water, soil water, sparkling mineral water, stream water, surface water, unclean water, waste water, all other applicable sample types.

#### PLWLY Suite PLWLY - PFAS in water acc. to (EU) 2020/2184 (DWD) incl. PFAS11

Leachate, other liquid matrices, process water, unclean water, waste water, all other applicable sample types.

#### PLW81 PFAS 50 in water including GenX (Complies with DWI guidance)

Fresh bathing water, Seashore bathing water, brackish water, clean water, fish farm water ground water, irrigation water, leachate, marine water, naturally occurring water, precipitation, raw water, fresh receiving water, soil water, sparkling mineral water, stream water, unclean water, waste water, other applicable sample types.

#### PLW82 PFAS 50 in Waste including GenX

Leachate, other liquid matrices, process water, unclean water, waste water, other applicable types of samples.

#### PLW83 PFAS (TOP) 23 Waste Water (unaccredited)

Leachate, other liquid matrices, process water, unclean water, wastewater, all other applicable sample types.

PLWKS Suite PLWKS - PFAS (TOP) 23 (unaccredited)

Fresh bathing water, seashore bathing water, brackish water, clean water, drain water, drinking water, fish farm water, ground water, irrigation water, leachate, marine water, naturally occurring water, other clean water, other naturally occurring water, precipitation, raw water, fresh receiving water, salt receiving water, soil water, sparkling mineral water, stream water, surface water, unclean water, waste water, all other applicable sample types.

# Water Hygiene Testing

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3 Environment Agency Chief Scientist's Group report on "Poly- and perfluoroalkyl substances (PFAS): sources, pathways and environmental data"; August 2021, available at https:// assets.publishing.service.gov.uk/ government/uploads/system/ uploads/attachment data/

(perfluorooctanoic acid) concentrations in drinking water"; January 2021, available at https://cdn.dwi.gov.uk/wpcontent/uploads/2021/01/12110137

file/1012230/Poly-\_and\_perfluoroalkyl\_ substances\_

Document references 1 Natural Resources Defence Council report, "Protecting Americans at Risk of PFAS Contamination & Exposure"-Testimony of Erik DOIson Senior Director for Health & Food Healthy People & Thriving communities programme; 15 May 2019, available at https:// www.ndc.org/sites/defau It/fiiles/testimony-

olsonhouse-pras-20190515.pdf 2 Drinking Water Inspectorate "Guidance on the Water Supply (Water Quality) Regulations 2016 specific to PFOS (perfluorooctane sulphonate) and PFOA

/PFOS-PFOA-guidance-2021.pdf