



Envirolab Services is NATA Accredited for PFAS in Biota

PFAS in Biota as Emerging Contaminants

Perfluorinated and Polyfluorinated Alkylated Substances or “PFAS” are a group of synthetic compounds that have been produced commercially since the 1950s and have been identified in recent years as contaminants of concern due to their toxicity, persistent nature and mobility in the environment. The manufacture and use of some PFAS, including Perfluorooctane Sulphonate (PFOS) has been banned in many countries.

Bioaccumulation and biomagnification of PFAS compounds in both flora and fauna potentially occurs. Hence, Envirolab Services can now provide **NATA Accredited** testing for the broad biota class of testing.

Comprehensive validation was undertaken in a dozen unique biota matrices to cover fish and seafood; animal products (including meat and dairy products); fruit and vegetables. Various high end analytical techniques are utilised to minimise matrix effects associated with the analysis of biota.



NATA Accredited for PFAS in Biota



Accreditation Number 2901

The National Association of Testing Authorities (NATA) is the authority that provides independent assurance of technical competence through a proven network of best practice industry experts for customers who require confidence in the delivery of their products and services.

As a leading laboratory, we are fully accredited and qualified to perform testing for PFAS in biota according to national standards.

With **NATA Accreditation**, you have the confidence that you are partnering with a laboratory that will provide you with quality results. Contact us today to find out more.

Sampling Biota

All samples should be accompanied by a corresponding Chain of Custody (COC).

However, given the complexity of certain biota, our team at Envirolab Services is keen to listen and assist you with all aspects of sampling and subsampling for PFAS analysis. For example, there might be circumstances where foliage analysis requires the inclusion of dust and / or soil particles. Perhaps the leaves themselves may only be relevant for your investigation?

Whatever the size of your project, wherever the location and whichever your requirements, we can provide you with extensive experience whilst meeting all relevant quality standards and subsampling protocols. That's why when it comes to providing support, we are the first choice for our clients.

- ✓ **NATA Accredited for PFAS in Biota**
- ✓ **NATA Accredited for PFAS in Blood and Serum**
- ✓ **Highly skilled and experienced team dedicated to providing quality results**
- ✓ **Rapid turnaround times**

Quality customer service is our prime objective. Our experience, together with state-of-the-art facilities ensure that you are provided with a fast turnaround of results.

Most important of all, you have a dedicated team. For further information, [Simon Mills](#), [Phalak Inthakesone](#) and [Ashley Miller](#) are ready to answer questions and assist with your testing requirements.



Testing for PFAS in Biota at Envirolab Services



TABLE 1: PQLs for PFAS in Biota

Compounds	Acronym	(µg/kg)
Perfluorobutane sulfonic acid	PFBS	1-5
Perfluoropentane sulfonic acid	PFPeS	1-5
Perfluorohexane sulfonic acid (short suite)	PFHxS	1-5
Perfluoroheptane sulfonic acid	PFHpS	1-5
Perfluorooctane sulfonic acid (short suite)	PFOS	1-5
Perfluorodecane sulfonic acid	PFDS	1-5
Perfluorobutanoic acid	PFBA	2-5
Perfluoropentanoic acid	PFPeA	2-5
Perfluorohexanoic acid	PFHxA	1-5
Perfluoroheptanoic acid	PFHpA	1-5
Perfluorooctanoic acid (short suite)	PFOA	1-5
Perfluorononanoic acid	PFNA	1-5
Perfluorodecanoic acid	PFDA	2-10
Perfluoroundecanoic acid	PFUnDA	2-10
Perfluorododecanoic acid	PFDoDA	2-10
Perfluorotridecanoic acid	PFTriDA	2-10
Perfluorotetradecanoic acid	PFTeDA	2-50
4:2 Fluorotelomer sulfonic acid	4:2 FTS	1-5
6:2 Fluorotelomer sulfonic acid (short suite)	6:2 FTS	1-5
8:2 Fluorotelomer sulfonic acid (short suite)	8:2 FTS	1-5
10:2 Fluorotelomer sulfonic acid	10:2 FTS	1-5
Perfluorooctane sulfonamide	FOSA	5-20
N-Methyl perfluorooctane sulfonamide	MeFOSA	5-20
N-Ethyl perfluorooctane sulfonamide	EtFOSA	5-20
N-methyl perfluorooctane sulfonamidoethanol	MeFOSE	5-50
N-Ethyl perfluorooctane sulfonamidoethanol	EtFOSE	5-50
N-methyl perfluorooctane sulfonamidoacetic acid	MeFOSAA	2-10
N-ethyl perfluorooctane sulfonamidoacetic acid	EtFOSAA	2-10

Reporting and Interpretation of Results

The current available list of PFAS available at Envirolab Services are detailed above in **Table 1**.

The practical quantification limit (PQL) for more complex matrices (e.g. eggs / liver) require complex preparation steps, compared to the less complex matrices (fruit and vegetables / milk), which therefore, affect reporting limits. Ask us if there is a particular reporting limit(s) required for your project?

For further information, the links below provide proposed trigger points for PFAS and some guidance on sampling protocols.

References and Further Reading

Food Standards Australia New Zealand has proposed trigger points for investigation of PFOS, and PFHxS in various food commodities along with some higher values for PFOA: [http://www.health.gov.au/internet/main/publishing.nsf/content/2200FE086D480353CA2580C900817CDC/\\$File/Consolidated-report-perfluorinated-chemicals-food.pdf](http://www.health.gov.au/internet/main/publishing.nsf/content/2200FE086D480353CA2580C900817CDC/$File/Consolidated-report-perfluorinated-chemicals-food.pdf)

FSANZ report on Edith River, Northern Territory 2013: https://dpir.nt.gov.au/_data/assets/pdf_file/0006/260187/TraceElementsNTFish.pdf

Interim Guideline on the Assessment and Management of Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) Contaminated Sites Guidelines, Government of Western Australia Department of Environmental Regulation (Version: 2.1): https://www.der.wa.gov.au/images/documents/your-environment/contaminated-sites/guidelines/Guideline_on_Assessment_and_Management_of_PFAS_v2.1.pdf

Contact your closest Envirolab laboratory today



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Great Science. Great Service.