

Environment Testing









Perfluorinated Compounds (PFCs)

Perfluorochemicals or Perfluorinated compounds (PFCs) are a large group of manufactured compounds that are widely used as surfactants in industrial applications. Many of these applications make everyday products more resistant to stains, grease and help to make them repel water. PFCs are also heavily used in Aqueous Film Forming Foams (AFFF) that are used to fight fires and also in fire training exercises. Due to their chemical resistence and biological persistence several PFCs, perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) in particular, have been named in the Stockholm Convention as Persistent Organic Pollutants (POPs). PFCs demonstrate unique chemical characteristics that are exhibited by their bioaccumulation in wildlife and their propensity to migrate to and from soil to water. There is widespread wildlife and human exposure to PFCs, predominantly PFOA and PFOS.

Eurofins Environment Testing US has supported PFC testing for more than 10 years and employs EPA Method 537 to test for the drinking water Unregulated Contaminants Monitoring Rule (UCMR) 3 list of compounds, along with a modified method to report an expanded list of compounds and for the analysis of non-potable water matrices. These methods utilize LC/MS/MS technology in order to detect and differentiate the compounds of interest at the necessary reporting limits.

Why Choose Eurofins Environment Testing US?

- With full-time staff available 24/7, we are able to accommodate projects of any size and meet the project turnaround times.
- A large inventory of instrumentation with built-in redundancy ensures timely reporting to meet project schedules and the ability to accommodate schedule and scope changes.
- Routine support of PFC programs to satisfy multiple stakeholders involved including Department of Defense (DoD), EPA, state agencies, commercial manufacturers as well as subcontract support to lab partners.
- Method development and method optimization to expand compound lists and variety of matrices that can be accommodated.

Our Capabilities

With emerging contaminants, many stakeholders and technical groups can be involved, each with unique objectives and goals. The laboratory needs to provide data and deliverables that meet the needs of each. Eurofins Environment Testing laboratories hold UCMR3 certification, DoD ELAP certification and state accreditations for perfluorinated

chemical analysis. Analytical testing can be performed on many environmental matrices including drinking water, soil, sediments, tissues and consumer products.

Eurofins Environment Testing
Laboratories perform analytical services
using LC/MS/MS and HRMS technologies
in support of trace level reporting of
emerging contaminants. This depth of
knowledge, redundancy of systems
and size of our facilities is key to our
success in supporting the PFC market.
Reinvestment in the business ensures
that we can continue to offer high
sensitivity methods, low reporting limits
and compliance with method protocols in
order to meet any regulatory guidance in
this evolving market.

Eurofins Eaton Analytical

Eurofins Eaton Analytical was one of the first commercial laboratories nationwide to secure laboratory approval for EPA's UCMR 3 and was responsible for more than 30% of the national UCMR3 PFC data. Eurofins Eaton Analytical maintains dedicated instruments specifically for Method 537 at both the Monrovia

and South Bend laboratories, and a customized small volume method in Monrovia optimized for short chain PFCs, and offers extensive experience in low-level reporting. As the largest potable water focused laboratory in the United States, we have worked with municipalities, multi nationals, state governments, industry associations and the EPA.

Eurofins Lancaster Laboratories Environmental

Eurofins Lancaster Laboratories Environmental have worked with federal. state and local government agencies, commercial clients and research facilities since 1961 to satisfy the most stringent quality assurance/quality control and reporting requirements. With experienced staff and laboratory space dedicated to PFC testing, we offer analysis on potable and non-potable water, soils, sediments and tissue samples. Data can be provided in a Level II, III or IV Data Deliverable format to accommodate your unique project challenges. We worked alongside EPA in the validation of EPA Method 537 and therefore became one of the first to have experience with the method.

Compound List

Acron	ıym
PFRS	

Perfluorobutanesulfonate*	PFBS
Perfluorobutanoic acid**	PFBA
Perfluorohexanesulfonate	PFHxS
Perfluoro-octanesulfonate*	PFOS
Perfluorohexanoic acid*	PFHxA
Perfluoroheptanoic acid*	PFHpA
Perfluorooctanoic acid*	PFOA
Perfluorononanoic acid*	PFNA
Perfluorodecanoic acid	PFDA
Perfluoroundecanoic acid*	PFUnA
Perfluorododecanoic acid*	PFDoA
Perfluorotridecanoic acid*	PFTrDA
Perfluorotetradecanoic acid*	PFTA
N-ethyl perfluorooctanesulfonamidoacetic acid	NEtFOSAA
N-methyl perfluorooctanesulfonamidoacetic acid	NMeFOSAA
8:2 fluorotelomersulfonate	8:2 FTS

^{*} Both Eurofins Lancaster Laboratories Environmental and Eurofins Eaton Analytical test for these compounds

Eurofins Environment Testing US - Centers of Excellence

574-233-4777

^{**} Performed at Eurofins Eaton Analytical, Monrovia