

For LabSolutions™ LCMS

LC/MS/MS Method Package for PFAS in Drinking Water



LCMS-8050

Provides Methods for Analyzing Per- and Polyfluoroalkyl Substances in Drinking Water According to EPA Methods 533 and 537.1

The United States Environmental Protection Agency (US EPA) has standardized two methods for the analysis of Per- and Polyfluoroalkyl Substances (PFAS) in drinking water: EPA Method 537.1 and 533, encompassing a total of 29 PFAS. These methods were used as reference for creating a vetted LC/MS/MS Method Package for Analyzing PFAS in Drinking Water. This method package includes ready-to-use analytical conditions for EPA Methods 533 and 537.1, examples of analytical procedures for the methods, and various other information, such as precautions for sample preparation and analysis. Using this product, 52 PFAS compounds* in drinking water can be analyzed.

LC/MS/MS Method Package for PFAS in Drinking Water

1. Ready-to-Use Analytical Methods

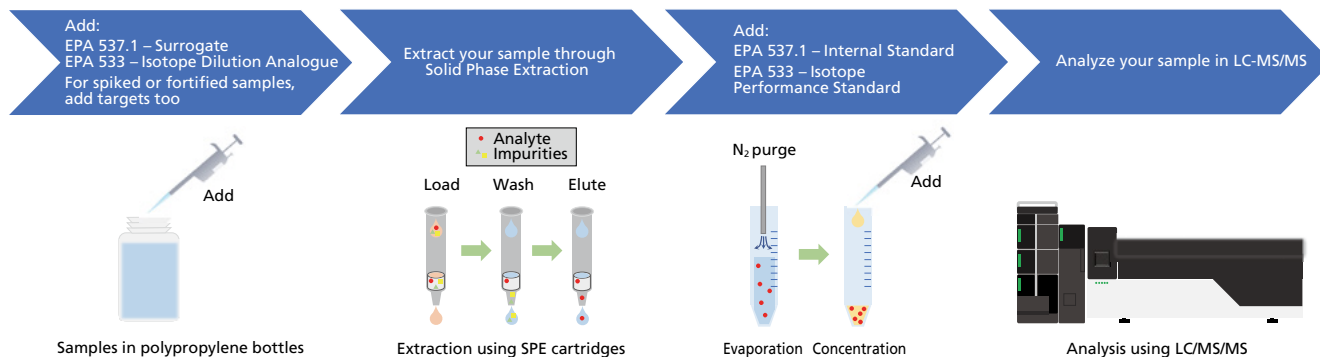
The package includes optimized analytical conditions for LC/MS/MS analysis, enabling analysis to start as soon as the system, reagents, and columns are available. There is no need to conduct a time-consuming process to identify analytical conditions.

2. Illustrated Examples of Analytical Procedures

Step-by-step diagrams guide the analysts, even the most unexperienced, through the steps of the EPA approved analytical workflows. In addition, each procedural step includes the corresponding text from the relevant EPA method as a reference when needed.

3. Recommendations for Analysis

Recommendations for ensuring an efficient analysis process are included.



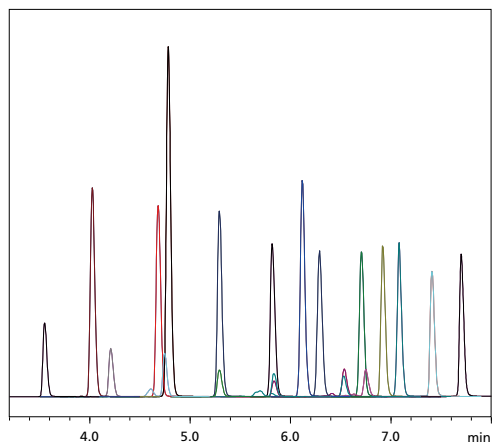
Optional Kit for PFAS Analysis

The "Optional Kit for PFAS Analysis" (sold separately) is available to minimize background contribution from PFAS potentially leaching from liquid contact surfaces in the LC system. Using the Method Package for PFAS in combination with this kit will enable PFAS analysis with even higher reliability and robustness.

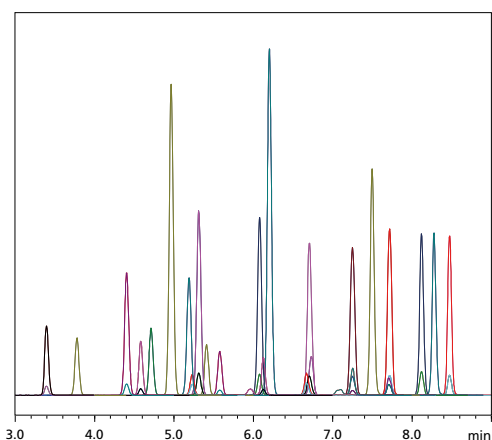
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Representative Chromatograms

EPA method 537.1



EPA method 533



List of Targeted Compounds

Compound	EPA 537.1	EPA 533	Compound	EPA 537.1	EPA 533
PFEESA		Target	¹³ C ₂ -PFHxA	SURR	
HFPO-DA	Target	Target	¹³ C ₃ -HFPO-DA	SURR	IDA
NFDHA		Target	¹³ C ₂ -PFDA	SURR	
PFOS	Target	Target	d5-NMeFOSAA	SURR	
PFUnA	Target	Target	¹³ C ₂ -PFOA	ISTD	IPS
NMeFOSAA	Target		¹³ C ₄ -PFOS	ISTD	IPS
PFPeA		Target	d3-NMeFOSAA	ISTD	
PFPeS		Target	¹³ C ₃ -PFBA		IPS
6:2 FTS		Target	¹³ C ₄ -PFBA		IDA
NETFOSAA	Target		¹³ C ₅ -PFPeA		IDA
PFHxA	Target	Target	¹³ C ₃ -PFBS		IDA
PFDoA	Target	Target	¹³ C ₂ -4:2FTS		IDA
PFOA	Target	Target	¹³ C ₅ -PFHxA		IDA
PFDA	Target	Target	¹³ C ₄ -PFHpA		IDA
PFHxS	Target	Target	¹³ C ₃ -PFHxS		IDA
PFBA		Target	¹³ C ₂ -6:2FTS		IDA
PFBS	Target	Target	¹³ C ₈ -PFOA		IDA
PFHpA	Target	Target	¹³ C ₉ -PFNA		IDA
PFHpS		Target	¹³ C ₈ -PFOS		IDA
PFNA	Target	Target	¹³ C ₇ -8:2FTS		IDA
PFTeDA	Target		¹³ C ₆ -PFDA		IDA
PFMPA		Target	¹³ C ₇ -PFUnA		IDA
8:2 FTS		Target	¹³ C ₂ -PFDoA		IDA
PFTrDA	Target				
9Cl-PF3ONS	Target	Target			
4:2 FTS		Target			
11Cl-PF3OUds	Target	Target			
PFMBA		Target			
ADONA	Target	Target			

SURR: Surrogate
 ISTD: Internal Standard
 IDA: Isotope Dilution Analogue
 IPS: Isotope Performance Standard

* Including internal standard substances, surrogates, etc.

Precautions

1. Requires LabSolutions LCMS Ver. 5.113 or later and LabSolutions Insight™ Ver. 3.8 SP3 or later.
2. This method package is intended for research use only. It may not be used for clinical diagnostic applications.

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