

PFAS CRM Native Standards

Certified Reference Materials for
EPA Methods 533 and 537.1

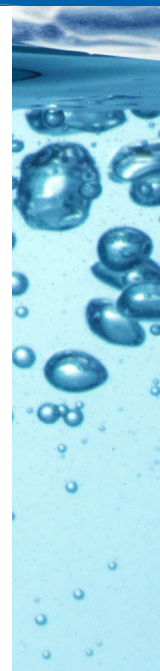


- ▶ All analytes at the same concentration as acid form
- ▶ Easy calculation and dilution












Select Your PFAS Product by Method

Phenova native PFAS CRM eliminates the need for tedious calculations **reducing calibration errors** and **improving lab throughput**.



EPA 533 Specific	Description	Part Number	Feature and Benefit
PFAS CRM 	EPA 533 mix 2 µg / mL in methanol	AL0-101838	Complete native PFAS standards per EPA Method 533 in one vial. All analytes at 2 ppm in Methanol as acids for easy calculation and dilution.
SPE Cartridge (EPA 533) 	Strata™ X-AW 33 µm Polymeric Weak Anion, 500 mg / 6mL tubes , 30/pk	8B-S038-HCH	A weak anion-exchange functionalized polymeric sorbent that allows for complete retention of acidic compounds with a pK _a less than 5, making 100 % organic wash conditions possible. A 100 % organic wash ensures that the maximum amount of interferences are removed from the target compound.
EPA 537.1 Specific			
PFAS CRM 	EPA 537.1 mix 2 µg / mL in methanol	AL0-101839	Complete native PFAS standards per EPA Method 537.1 in one vial. All analytes at 2 ppm in Methanol as acids for easy calculation and dilution.
PFAS CRM 	EPA 537.1 + EPA 533 mix 2 µg / mL in methanol	AL0-101840	Complete native PFAS standards for both EPA Method 533 and 537.1 in one vial. All analytes at 2 ppm in Methanol as acids for easy calculation and dilution.
SPE Cartridge (EPA 537.1) 	Strata SDB-L 500mg/6mL tubes	8B-S014-HCH	A rugged polymer sorbent that is pH stable from 1-14 and offers hydrophobic and aromatic selectivity for reversed phase applications.
Additional PFAS Methods			
<p>From its primary sources in fire suppression foams, industrial discharges and consumer products, PFAS is also widely found to occur in soils, sediments, surface water, groundwater and wastewater discharges, illustrating the widespread dispersion and persistence of this unique class of compounds. Initially many labs have used the DOD QSM 5.3 as guidance for PFAS in non-drinking water matrices. Most recently, EPA 1633 has been published to address these complex matrices.</p>			
DOD / QSM 	Strata PFAS (WAX/GCB) 200mg, 50mg, 6 mL tubes, 30/pk	CS0-9207	Strata PFAS is a stacked (WAX/GCB) solid phase extraction cartridge for DOD QSM 5.1/5.3 applications. Reproducible extraction. 2x gains in productivity for sample throughput.
Soils/Sediments/ Biota 	Strata PFAS (WAX/GCB) 200mg, 50mg, 6 mL tubes, 30/pk	CS0-9214	<p>Strata PFAS (GCB/WAX) solid phase extraction cartridge that can be used in soils and sediment matrices that offers:</p> <ul style="list-style-type: none"> • Reliable SPE with 2x gains in productivity • Reduced need for multiple tubes, transfer steps, and wasted time • Reproducible extraction for Per- and Polyfluoroalkyl Substances (PFAS)
EPA 1633  	<p>Strata PFAS (GCB/WAX) 50mg, 200mg 6mL tubes, 30/pk</p> <hr/> <p>Strata GCB, 250mg/6mL, 30/pk</p>	8B-S038-SCH 8B-S528-FHC	<p>A weak anion-exchange functionalized polymeric sorbent that allows for complete retention of acidic compounds with a pK_a less than 5, making 100 % organic wash conditions possible. A 100 % organic wash ensures that the maximum amount of interferences are removed from the target compound.</p>

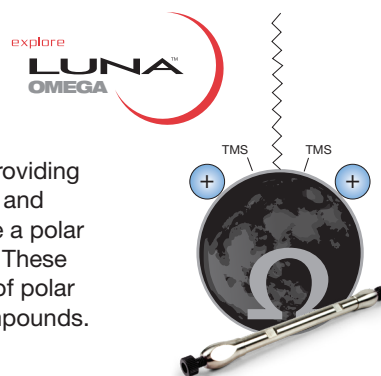
More PFAS Products for your PFAS Methods

Product	Description	Part No.	Description / Benefit	
 Delay Column	Luna™ 5µm C18(2) 30 x 3mm	00A-4252-YO	Luna C18(2) phase is an octadecyl silane with ligands bound to the silica surface, resulting in a very hydrophobic stationary phase that offers great methylene selectivity. The non-polar endcapping virtually eliminates silanol interactions.	
  	Analytical Column(s)	Luna Omega 3µm, PS C18 50 x 3mm	00B-4758-YO	A multi-modal, 100% aqueous stable C18 column with a positive surface modification offers a unique selectivity and provides valuable increase in retention of acids through ionic/polar interactions. The C18 ligand stimulates hydrophobic retention that greatly promotes increased resolution between analytes of interest. Available in several formats.
	Kinetex™ EVO 5µm, C18 100 x 2.1mm	00D-4633-AN	A durable, homogeneous porous shell is grown on a solid silica core to create a core-shell particle resulting in less band broadening when compared to fully porous particles. Kinetex Evo delivers extremely high efficiencies. Available in several formats.	
	Gemini™ 3µm, 50 x 2mm	00B-4439-BO	A rugged reversed phase HPLC column that offers extended lifetime under extreme pH conditions and excellent stability for reproducible, high efficiency separations. Ideal for analytical and preparative separations of basic and acidic compounds; high and low pH conditions (pH 1-12). Available in several formats.	
	Column Security	SecurityGuard™ ULTRA Holder, for UHPLC Columns 2.1 to 4.6mm ID, Ea	AJ0-9000	SecurityGuard features a standard guard cartridge system that is guaranteed to extend the lifetime of your column by capturing sample contaminants and improve selectivity for early eluting PFAS compounds.
	SecurityGuard Cartridges, PS C18, 4 x 2.0mm ID, 10/pk	AJ0-7605		
	SecurityGuard ULTRA cartridges for EVO-C18 UHPLC, sub-2µm and core-shell columns with 2.1 mm internal diameters (ID), 3/pk	AJ0-9298	SecurityGuard ULTRA prevents contamination of analytical column.	
	Security Link	The SecurityLINK™ SS 150 x 125µm length with 10-32 Fittings, Ea	AJ1-1521	A finger-tight fitting system simplifies column connections. Torque limiting technology prevents column and port damage from over tightening. Easy to install. Fitting self-adjusts at column inlet to ensure zero dead volume. UHPLC and HPLC compatibility: pressure rated to 19,000 psi (1,310 bar)
	Vial Caps	Verex™ Cert+ Cap (one-piece), 9mm, PE w/ Starburst pre-Slit, 2mL, 1000/pk	AR0-89P6-13-C	Starburst pre-slit
	Polypropylene Vials	Verex Vial, 9mm Screw, PP, 1.7mL	AR0-39P0-13	Verex and autosampler vials offer the lowest ion content possible to reduce sample loss and contamination. Tested and certified for cleanliness, performance, and consistency.
	Verex Vial, 9mm Screw, PP, 300µL	AR0-39P2-13		
	Verex Vial, 9mm Screw, PP, 700µL	AR0-39P1-13		
	SPE cartridge Graphitized Carbon Black	Strata™ GCB 250mg/6cc tubes	8B-S528-FCH	Strata GCB is a graphitized carbon black SPE sorbent that offers a better retention of polar compounds compared to C8 and C18 silica products.
	Strata GCB 25mg pass-through cartridges	8B-S528-CAJ		
	Large Volume SPE	Adaptor Cap for 1,3 and 6mL SPE tubes, w/ luer tip, polypropylene	AH0-7191	Adaptor to interface between 6mL SPE cartridges and large volume holder AH0-7005
	SPE Sample Reservoir	Empty SPE tubes, 60cc, polypropylene, 16/pk	AH0-7005	Large volume tube that mounts onto 6mL SPE cartridges. Used for loading large sample volumes.

HPLC and UHPLC Columns

Luna Omega

Luna Omega Polar C18 is a novel UHPLC/HPLC column stationary phase capable of providing a unique selectivity within a wide elution window and increased retention for both polar and non-polar analytes. The all-purpose C18 ligand provides hydrophobic interactions while a polar modified particle surface provides enhanced polar retention and also aqueous stability. These attributes make the Luna Omega Polar C18 an excellent choice for balanced retention of polar and hydrophobic compounds as well as to solely enhance retention of highly polar compounds.



Kinetex Core-Shell Technology Columns

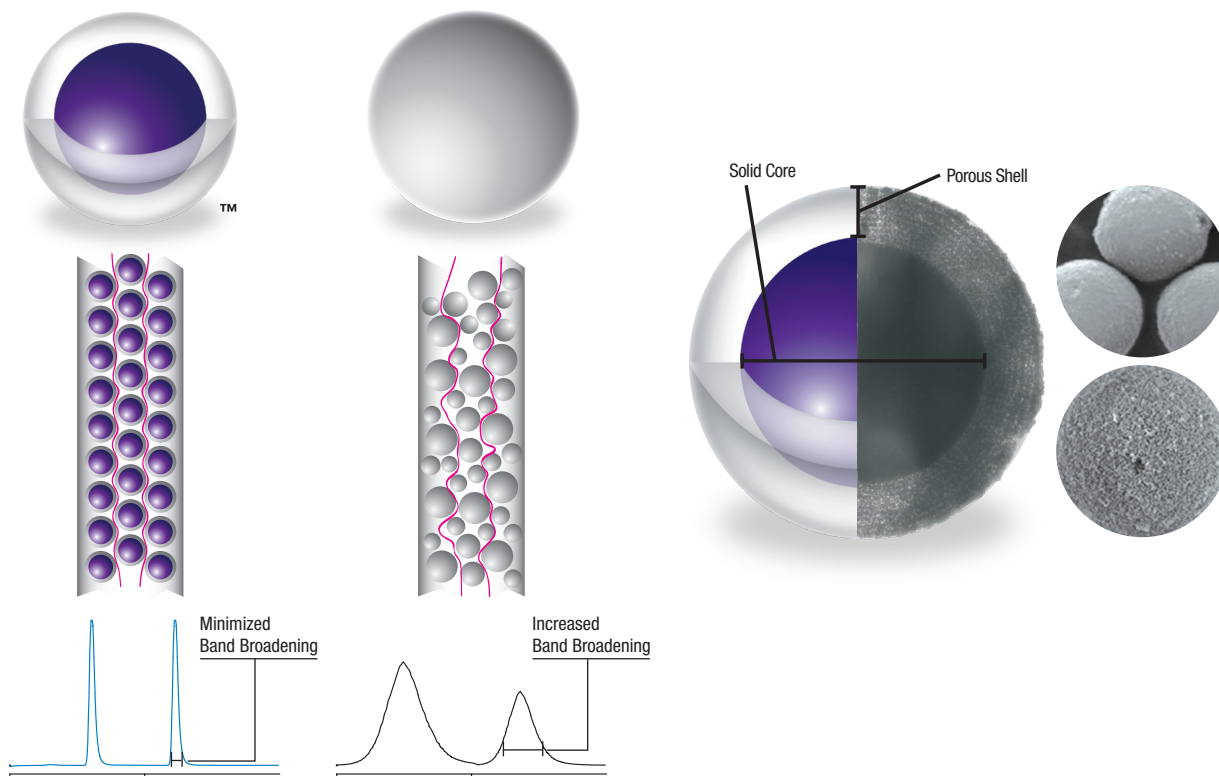
Kinetex HPLC columns are packed with core-shell particles, particles that have a uniform porous shell grown on a silica core. The result is a versatile HPLC column that gives extremely high efficiencies on any UHPLC, HPLC, and Preparative LC system.

Kinetex 5 μm HPLC columns have been shown to dramatically improve standard 3 and 5 μm Methods while Kinetex 1.3, 1.7, and 2.6 μm columns offer un-paralleled HPLC performance for HPLC and UHPLC systems alike.



Kinetex Core-Shell

Fully Porous



For more information about HPLC and UHPLC Columns for PFAS analysis, visit <https://www.phenomenex.com>

EPA 533 and 537.1



EPA 533
Strata X-AW



EPA 537.1
Strata SDB

Q: How can we simplify SPE and sample cleanup to save time and possible errors?

A: Develop a cartridge with *both* phases!

Quality systems manual for environmental laboratories (Guidance Document) solid samples, soils, biota, sediments, or non-drinking water samples.

Step 1: SPE sorbent

Step 2: Sample cleanup with graphitized carbon black (GCB)



Strat X-AW



Strata GCB



Strata PFAS

Strata PFAS 200 mg WAX/50 mg GCB
Strata PFAS 500 mg WAX/50 mg GCB

Have questions about PFAS analysis? Contact our experts
<https://www.phenomenex.com/chat>

PFAS Certified Reference Materials for EPA Methods 533 and 537.1

Ordering Information



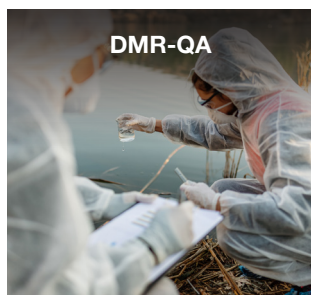
Part Number	AL0-101839	AL0-101838	AL0-101840	
CRMs are 2 µg / mL in Methanol ea. In 1 mL volume				
	CAS RN	EPA 537.1	EPA 533	EPA 533 + 537.1
Perfluoroalkyl carboxylic acid (PFCA)				
Perfluorobutanoic acid (PFBA)	375-22-4	NA	✓	✓
Perfluoropentanoic acid (PFPeA)	2706-90-3	NA	✓	✓
Perfluorohexanoic acid (PFHxA)	307-24-4	✓	✓	✓
Perfluoroheptanoic acid (PFHpA)	375-85-9	✓	✓	✓
Perfluorooctanoic acid - br/lin (PFOA)	335-67-1	✓	✓	✓
Perfluorononanoic acid (PFNA)	375-95-1	✓	✓	✓
Perfluorodecanoic acid (PFDA)	335-76-2	✓	✓	✓
Perfluoroundecanoic acid (PFUnA)	2058-94-8	✓	✓	✓
Perfluorododecanoic acid (PFDoA)	307-55-1	✓	✓	✓
Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	✓	NA	✓
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	✓	NA	✓
Perfluoroalkane sulfonic acid (PFSA)				
Perfluorobutanesulfonic acid (PFBS)	375-73-5	✓	✓	✓
Perfluoropentanesulfonic acid (PFPeS)	2706-91-4	NA	✓	✓
Perfluorohexanesulfonic acid - br/lin (PFHxS)	355-46-4	✓	✓	✓
Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	NA	✓	✓
Perfluorooctanesulfonic acid - br/lin (PFOS)	1763-23-1	✓	✓	✓
Perfluoroalkane sulfonamides (FASA) and derivatives				
N-methyl perfluorooctanesulfonamidoacetic acid - br/lin (NMeFOSAA)	2355-31-9	✓	NA	✓
N-ethyl perfluorooctanesulfonamidoacetic acid - br/lin (NEtFOSAA)	2991-50-6	✓	NA	✓
Fluorotelomer sulfonic acid (FTSA)				
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	NA	✓	✓
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	NA	✓	✓
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	NA	✓	✓
Perfluoroalkyl ether carboxylic acid (PFECA)				
Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	NA	✓	✓
Perfluoro-4-methoxybutanoic acid (PFMBA)	863090-89-5	NA	✓	✓
Hexafluoropropylene oxide dimer acid (HFPO-DA/GenX)	13252-13-6	✓	✓	✓
Nonafluoro-3,6-dioxahexanoic acid (NFDHA)	151772-58-6	NA	✓	✓
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	✓	✓	✓
Polyfluoroalkyl ether sulfonic acid (PFESA)				
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	113507-82-7	NA	✓	✓
9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS)	756426-58-1	✓	✓	✓
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	763051-92-9	✓	✓	✓

Phenova, a Trusted and Experienced PT Provider

Phenova is a seasoned PT provider, with a team who collectively has over 300 years of experience in the PT and environmental industries. Phenova's success is based on personalized support, quality, and expertise. We are here to aid you with anything that will help excel your PT experience.

- Effective Product Designs
- Analytics and Reporting with PT Manage
- Corrective Action Assistance
- Accreditation Consulting

PT Studies, Quality Control, and Corrective Action Standards



Quality Certifications

Phenova PT Standards and CRMs are covered by one or all of the following quality certifications:

ISO/IEC 17025:2017

General requirements for the competence of testing and calibration laboratories.

ISO 17034:2016

General requirements for the competence reference material producers.

ISO/IEC 17043:2010

Conformity assessment – General requirements for proficiency testing.

TNI EL-V3-2009

General requirement for environmental proficiency testing providers.

Learn more about Phenova proficiency testing products and services
<https://www.phenova.com>

PFAS CRM Native Standards



Australia

t: +61 (0)2-9428-6444
auiinfo@phenomenex.com

Austria

t: +43 (0)1-319-1301
anfrage@phenomenex.com

Belgium

t: +32 (0)2 503 4015 (French)
t: +32 (0)2 511 8666 (Dutch)
beinfo@phenomenex.com

Canada

t: +1 (800) 543-3681
info@phenomenex.com

China

t: +86 400-606-8099
cninfo@phenomenex.com

Czech Republic

t: +420 272 017 077
cz-info@phenomenex.com

Denmark

t: +45 4824 8048
nordicinfo@phenomenex.com

Finland

t: +358 (0)9 4789 0063
nordicinfo@phenomenex.com

France

t: +33 (0)1 30 09 21 10
franceinfo@phenomenex.com

Germany

t: +49 (0)6021-58830-0
anfrage@phenomenex.com

Hong Kong

t: +852 6012 8162
hkinfo@phenomenex.com

India

t: +91 (0)40-3012 2400
indiainfo@phenomenex.com

Indonesia

t: +62 21 3952 5747
indoinfo@phenomenex.com

Ireland

t: +353 (0)1 247 5405
eireinfo@phenomenex.com

Italy

t: +39 051 6327511
italiainfo@phenomenex.com

Japan

t: +81 (0) 120-149-262
jpinfo@phenomenex.com

Luxembourg

t: +31 (0)30-2418700
nlinfo@phenomenex.com

Mexico

t: 01-800-844-5226
tecnicomx@phenomenex.com

The Netherlands

t: +31 (0)30-2418700
nlinfo@phenomenex.com

New Zealand

t: +64 (0)9-4780951
nzinfo@phenomenex.com

Norway

t: +47 810 02 005
nordicinfo@phenomenex.com

Poland

t: +48 22 51 02 180
pl-info@phenomenex.com

Portugal

t: +351 221 450 488
ptinfo@phenomenex.com

Singapore

t: 800-852-3944
sginfo@phenomenex.com

Slovakia

t: +420 272 017 077
sk-info@phenomenex.com

Spain

t: +34 91-413-8613
espinfo@phenomenex.com

Sweden

t: +46 (0)8 611 6950
nordicinfo@phenomenex.com

Switzerland

t: +41 (0)61 692 20 20
swissinfo@phenomenex.com

Taiwan

t: +886 (0) 0801-49-1246
twinfo@phenomenex.com

Thailand

t: +66 (0) 2 566 0287
thaiinfo@phenomenex.com

United Kingdom

t: +44 (0)1625-501367
ukinfo@phenomenex.com

USA

t: +1 (310) 212-0555
info@phenomenex.com

• All other countries/regions Corporate Office USA

t: +1 (310) 212-0555
www.phenomenex.com/chat



www.phenomenex.com

Phenomenex products are available worldwide. For the distributor in your country/region, contact Phenomenex USA, International Department at international@phenomenex.com