

Recommended Consumables for PFAS Analysis

►EPA 533

Some PFAS can be present in common lab supplies used for this method. If the individual PFAS of interest are present at substantial concentrations, they will impact the overall performance of your method, and, in some cases, your results will be outside commonly accepted QA/QC criteria, including those listed in EPA methods.

We have tested an extensive list of supplies, including sampling containers, pipette tips, vials, and more to verify they are suitable for the analysis of PFAS in accordance with EPA 533.

NOTE: SPE cartridges, sample reservoir, and vacuum manifold are commonly used for sample cleanup and concentration. Our recommendations are coming soon.

This list includes the supplies we evaluated and currently recommend.

WE STRONGLY RECOMMEND THAT YOU ALWAYS TEST FOR PFAS PRESENCE WHEN USING PRODUCTS FROM NEW MANUFACTURERS OR STARTING A NEW LOT.

TRODUCTS TROWNEW MANOTACTORERS OR STARTING A NEW EOT.		
P/N	ITEM NAME	DESCRIPTION
SIGM-B9907-12EA	Nalgene Bottles, Round, 250mL Capacity, 12/pk	Round, wide-mouth polypropylene bottle, ideal for sample collection for PFAS analysis. Includes linerless polypropylene cap for a leak-proof seal, 250 mL capacity. Style 2015, pack of 12.
SIGM-Z377341-1PAK	Nalgene Bottles, Square, 250mL Capacity, 12/pk	Square, wide-mouth polypropylene bottle, ideal for sample collection for PFAS analysis. Includes linerless polypropylene cap for a leak-proof seal, 250 mL capacity. Style 2110, pack of 12.
EPPE-0030122151	Eppendorf 15 mL Conical Tubes, 500/pk	Polypropylene tube with 1mL (approx.) gradation lines and polyethylene screw cap. 10 bags x 50 tubes.
https://well-labs.com/	Wellington EPA-533PAR	Native Analyte Primary Dilution Standard (PDS): 25 compounds
https://well-labs.com/	Wellington EPA-533ES	Isotope Dilution Standard PDS: 16 compounds
https://well-labs.com/	Wellington EPA-533IS	Isotope Performance Standard PDS: 3 compounds
220-91239-30	Tuning solution	LCMS Tuning Solution
227-30015-03	Shim-pack GIST C18 5µm, 3.0 x 50mm	Delay Column
220-91246-17	MarvelXACT Stainless Steel 254um x 150mm Tubing w/Fittings	Connector for Delay Column
227-30008-03	Shim-pack GIST C18, 3µm, 2.1 x 50mm	Analytical Column
227-30024-02	Column, LC, Shim-pack GIST Guard Column C18, 3um, 1.5x10 with Cartridge (2pcs) and Holder	Guard column and holder EPA 533
227-30024-01	Column, LC, Shim-pack GIST Guard Column C18, 3um, 1.5x10 with Cartridge (2pcs)	Guard column EPA 533
220-91524-97	Column, LC, Analytical Guard Coupler, Stainless Steel, with Fittings	Connecting guard column to analytical column

EPA 533

P/N	ITEM NAME	DESCRIPTION
220-91545-72	Ammonium Acetate, 25g	Honeywell LCMS analytical grade
220-91545-11	Methanol, 4 x 4L	Honeywell Chromasolv LCMS grade
220-91545-31	Methanol, 1 x 4L	Honeywell Chromasolv LCMS grade
220-91545-15	Water, 1 x 1L	B&J LCMS grade
220-91545-12	Water, 4 x 4L	Honeywell Chromasolv LCMS grade
220-91545-32	Water, 1 x 4L	Honeywell LCMS grade
SIGM-S0751-100G	Sodium Phosphate Monobasic, 100g	ReagentPlus grade, ≥99.0%, powder, in polypropylene bottle.
SIGM-S9763-100G	Sodium Phosphate Dibasic, 100g	ACS reagent grade, ≥99.0%, powder, in polypropylene bottle.
220-91545-77	Ammonium Hydroxide, 100mL	HPLC grade, 28-30% solution.
220-95281-15	Sodium Hydroxide, 500g	ACS Reagent Grade, >97%.
SIGM-A6283-500ML	Acetic Acid, 500mL	LCMS Grade
220-97331-94	Vials, 1.5mL, Clear Silanized Glass with PE/Silicone Cap & Septa, 12 x 32mm, 9mm opening 100/pk	PTFE-free caps and silanized glass vials
220-91530-72	Vials, Clear PP with PE/Silicone Cap & Septa, 12 x 32mm, 9mm opening 100/pk	PTFE-free caps and PP vials
220-97331-91	Vials, Screw Cap & Septa Only, PE/ Silicone, Blue, 100/pk	PTFE-free caps
SIGM-CLS4115-960EA	Pipette Tips, Corning DeckWorks, 0.1-10μL, 10 Trays x 96 Tips	Clear, 0.1-10µL polypropylene tips packaged in convenient 96-position trays. Non-sterile, RNase and DNase free. 10 trays x 96 tips per tray.
SIGM-CLS4117-960EA	Pipette Tips, Corning DeckWorks, 1-200µL, 10 Trays x 96 Tips	Yellow, 1-200µL polypropylene tips packaged in convenient 96-position trays. Non-sterile, RNase and DNase free. 10 trays x 96 tips per tray.
SIGM-CLS4713-1000EA	Pipette Tips, Corning, 100-1000μL, 10 Trays x 100 Tips	Blue, 100-1000µL polypropylene tips packaged in convenient 96-position trays. Non-sterile, RNase and DNase free. 10 trays x 100 tips per tray.
SIGM-Z640077-1000EA	Pipette Tips, Eppendorf epT.I.P.S. Standard, 0.1-20μL, 1000/pk Bulk	0.1-20µL pipette tip optimized for the Eppendorf pipette with complete sealing and reduced-force tip attachment and ejection. Also compatible with other pipettor brands. Bulk pack (2 bags of 500.) Long, narrow tips reach the base of narrow and high vessels without touching the top of the vessel edge.
SIGM-Z740030-1000EA	Pipette Tips, Millipore BRAND, 2-200µL, 1000/pk Bulk	Yellow polypropylene pipette tip, 2-200µL capacity. Non-sterile, RNase and DNase free. Bulk pack (1 bag of 1000.)
SIGM-CLS4868-1000EA	Pipette Tips, Corning, 100-1000μL, 1000/pk Bulk	Blue polypropylene pipette tip, 100-1000µL capacity. Non-sterile, bulk pack (1 bag of 1000.)
SIGM-54057-U	SPE Tube, Supelclean ENVI-WAX for EPA 533, 6mL, 500mg, 30/pk	Contains mixed-mode polymeric adsorbent commonly used in sample preparation for PFAS analysis. Direct equivalent to the specified SPE in method EPA 533.



Visit

www.OneLabOneEarth.com/pfas

for more information



Shimadzu Scientific Instruments 7102 Riverwood Drive, Columbia, Maryland 21046, U.S.A. Phone: 800-477-1227/410-381-1227, Fax: 410-381-1222

Company names, product/service names and logos used in this publication are trademarks and trade names of Shimadzu Corporation or its affiliates, whether or not they are used with trademark symbol "TM" or "®". Third-party trademarks and trade names may be used in this publication to refer to either the entities or their products/services. Shimadzu disclaims any proprietary interest in trademarks and trade names other than its own.

For Research Use Only. Not for use in diagnostic procedures.
The contents of this publication are provided to you "as is" without warranty of any kind, and are subject to change without notice. Shimadzu does not assume any responsibility or liability for any damage, whether direct or indirect, relating to the use of this publication.