

PFA Trace Analysis Labware

VITLAB® trace analysis labware from BrandTech Scientific is manufactured from PFA (a perfluoroalkoxy copolymer), which is highly resistant to heat and chemical contamination and has surface properties that greatly simplify cleaning. Use this labware for excellent results in ICP-MS, production and storage of trace analysis standards, isotope separations, sample digestions and more.

With the increasing need in trace analysis labs for ultra-low concentration determinations in the ng/g (ppb) and pg/g (ppt) range, the use of PFA labware has become more and more important. Other materials, when not specially treated, may be subject to interaction between the vessel and the sample, standards or reagents it contains. This may cause incorrect results with modern trace analysis instrumentation.

All BrandTech VITLAB® PFA trace analysis labware features visible, accurate, and permanent graduations for precise measuring. PFA Labware is suitable for sterilization using heat, gas, and chemical methods for handling sensitive biological solutions. BrandTech also offers corrosion-resistant PFA (Technical Grade) with small amounts of pre-consumer high-quality recycled PFA, for customers who need only the chemical resistance of PFA. See page 113.

VITLAB® PFA Labware: Pure, Cleanable, Rugged.

Properties

Excellent Temperature Stability: BrandTech's VITLAB® PFA trace analysis labware maintains its stability in temperatures from -200°C to 260°C (-328°F to 500°F).

No Leachable Metals: PFA is manufactured without metals such as calcium, aluminum, iron, magnesium, nickel, copper, manganese or zinc. These metals can leach into samples from other containers, and contaminate samples.

Simplified Cleaning: Conventional labware for trace analysis requires time-consuming and expensive cleaning. The hydrophobic and anti-adhesive properties of the exceptionally smooth-surfaced PFA labware simplify the cleaning process, making it ideal for trace analysis.

Superior Chemical Resistance: PFA is inert with most reagents, including the nitric and hydrochloric acid routinely used in cleaning trace analysis labware. This stability significantly reduces the risk of cross-contamination.

Excellent Long-Term Stability: PFA containers often extend the stability of low (ppb) concentration standards. Such stability reduces the time and cost of renewing trace analysis standard solutions.

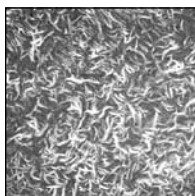
Highly Translucent: Translucency is important for making accurate measurements using volumetric labware.

VITLAB 

Scanning electron microscopy illustrates the advantages of PFA in trace analysis. (Magnification: 8000X)

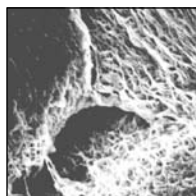
Bottle – HDPE

Scanning electron microscopy of this bottle wall shows the roughness of HDPE. The increased surface area of HDPE can lead to carryover of reagent molecules.



Beaker – PTFE

Similar to HDPE, electron micrographs of this beaker reveal a typically rough surface that can interact with reagent molecules and complicate cleaning.



Evaporating dish – PFA

Even at 8000x magnification, the surfaces of this PFA evaporating dish are very smooth. It is this smoothness, combined with PFA's hydrophobic, anti-adhesive and inert properties, that simplify cleaning.



Low-Form Griffin Beakers, PFA



- Molded graduations are easy to read and resistant to wear from repeated use.
- Nesting design conserves bench and storage space.
- Autoclavable, easy to clean, withstand temperatures from -200°C to 260°C.
- Meets the requirements of ISO 7056.

ORDERING INFORMATION

Volume mL	Grad mL	Height mm	Diam. mm	Qty./Pack	Cat. No.	2009 List Price
25mL	5	50	32	1	V110205	\$25.00
50mL	10	59	39	1	V110305	31.50
100mL	20	72	50	1	V110405	45.00
250mL	50	96	67	1	V110605	74.00
500mL	100	122	88	1	V110905	113.00
1,000mL	100	141	109	1	V111005	202.00

Volumetric Flasks with Screw Caps, PFA



- Flasks feature individually calibrated ring-markings.
- Durable markings are easy to read.
- Highly-transparent surfaces simplify meniscus verification.
- PFA screw-caps help protect against outside contamination.
- Meets Class A tolerances per DIN EN ISO 1042.
- Easy to clean. Autoclavable at 250°F (121°C) without affecting tolerances.

ORDERING INFORMATION

Volume mL	Accuracy +/- mL	Height mm	Thread GL	Qty./Pack	Cat. No.	2009 List Price
10mL	0.04	115	18	1	V107097	\$170.00
25mL	0.04	115	18	1	V107197	\$171.00
50mL	0.06	150	18	1	V107297	175.00
100mL	0.10	180	18	1	V107397	217.00
250mL	0.15	235	25	1	V107497	272.00
500mL	0.25	270	25	1	V107597	314.00

Evaporating Dishes, PFA with Snap on Lid, PE



- Evaporating dishes are autoclavable, easy to clean, and withstand temperatures from -200°C to 260°C. Lid is not autoclavable.

ORDERING INFORMATION

Volume mL	Qty./Pack	Cat. No.	2009 List Price
25mL	1	V103297	\$57.00
50mL	1	V103397	76.00

Wide Neck Reagent Bottles with Screw Caps, PFA



- Leach-resistant bottles for long-term storage of solvents and standards.
- PFA screw caps have a molded sealing ring for a positive seal.
- Autoclavable, easy to clean, withstand temperatures from -200°C to 260°C.

ORDERING INFORMATION

Volume mL	Height mm	Diam. mm	Thread	Qty./Pack	Cat. No.	2009 List Price
250mL	150	61	S 40	1	V109497	\$145.00
500mL	179	76	S 40	1	V109597	200.00
1,000mL	217	96	S 40	1	V109697	278.00
2,000mL	245	130	S 40	1	V109797	573.00
2,500mL	290	130	S 40	1	V109897	743.00
5,000mL	320	175	S 40	1	V109997	1,110.00

Narrow Neck Reagent Bottles with Screw Caps, PFA



- Leach-resistant bottles for long-term storage of solvents and standards.
- PFA screw caps have a molded sealing ring for a positive seal.
- Autoclavable, easy to clean, withstand temperatures from -200°C to 260°C.

ORDERING INFORMATION

Volume mL	Height mm	Diam. mm	Thread	Qty./Pack	Cat. No.	2009 List Price
50mL	86	37	S 28	1	V109297	\$84.00
100mL	120	45	S 28	1	V109397	119.00
250mL	160	61	S 28	1	V108297	138.00
500mL	190	76	S 28	1	V108397	190.00

Round Bottom Flasks, PFA



- For rotary evaporators and distillation of high-purity chemicals.
- With 29/32 ground socket.
- Translucent surfaces simplify solvent monitoring.
- Autoclavable, easy to clean, withstand temperatures from -200°C to 260°C.

ORDERING INFORMATION

Volume mL	Height mm	Ground Socket	Diam. mm	Qty./Pack	Cat. No.	2009 List Price
100mL	117	29/32	65	1	V107797	\$114.00
250mL	147	29/32	88	1	V107897	133.00
500mL	177	29/32	107	1	V107997	182.00

Sample Tubes, PFA



- For sample preparation, centrifugation, and autosampler racks.
- The 15mL sample tube (V103897) includes a calibrated ring-mark at 10mL and a PFA screw cap.
- Autoclavable, easy to clean, withstand temperatures from -200°C to 260°C.

ORDERING INFORMATION

Volume mL	Height mm	Diam. mm	Thread GL	Qty./Pack	Cat. No.	2009 List Price
12	110	16	-	1	V103797	\$45.00
15	110	22	25	1	V103897	84.00

Sample Containers with Screw Cap, PFA



- For sample collection, transport and storage.
- Supplied with a PFA screw cap.
- Autoclavable, easy to clean, withstand temperatures from -200°C to 260°C.

ORDERING INFORMATION

Volume mL	Height mm	Diam. mm	Thread GL	Qty./Pack	Cat. No.	2009 List Price
30	54	38	40	1	V130297	\$54.00
60	90	38	40	1	V130397	65.00
90	62	54	56	1	V130497	73.00
180	112	54	56	1	V130597	91.00