Bottle-Vac™ Samplers

Bottle-Vac™ samplers are the most economical gas-phase sample collection containers available. They use Micro-QT™ Valves which are small and non-contaminating by design. Our Bottle-Vac™ samplers are as gas-tight as stainless-steel canisters, making them a low-cost alternative for whole air sampling. A sample is only exposed to treated glass, 316 stainless or Silonite™ coated stainless-steel, and a small O-ring which forms the seal at the cap. All of these materials are inert, allowing for a wide range of analytes to be recovered. Time-weighted sampling techniques are possible using MiniCan™ sampling inlets, or by using Helium Diffusion Sampling.

Bottle-Vac™ Samplers

Description	Unit	Part #
40mL Bottle-Vac™ Sampler	EA	29-BV040A
60mL Bottle-Vac™ Sampler	EA	29-BV060A
125mL Bottle-Vac™ Sampler	EA	29-BV125A
125mL Bottle-Vac™ Sampler (w/ Silonite™ Valve)	EA	29-BV125AS
250mL Bottle-Vac™ Sampler	EA	29-BV250A
250mL Bottle-Vac™ Sampler (w/ Silonite™ Valve)	EA	29-BV250AS
500mL Bottle-Vac™ Sampler	EA	29-BV500A
500mL Bottle-Vac™ Sampler (w/ Silonite™ Valve)	EA	29-BV500AS
1L Bottle-Vac™ Sampler	EA	29-BVL1A
1L Bottle-Vac™ Sampler (w/ Silonite™ Valve)	EA	29-BVL1AS
30-0"Hg Vacuum Gauge (w/ Micro-QT™)	EA	29-70010QT
30"Hg-0-30psig Compound Gauge (w/ Micro-QT™)	EA	29-70020QT

REPLACEMENT PARTS

Description	Unit	Part #
Micro-QT™ Valve (40 /60 / 125mL)	EA	MQT-BV24
Micro-QT™ Valve, Silonite™ (40/ 60 / 125mL)	EA	MQT-BV24S
Micro-QT™ Valve (250 / 500/ 1L)	EA	MQT-BV28
Micro-QT™ Valve, Silonite™ (250 / 500 / 1L)	EA	MQT-BV28S
125mL Amber Bottles, deactivated*	EA	39-75125AD
250mL Amber Bottles, deactivated*	EA	39-75250AD
500mL Amber Bottles, deactivated*	EA	39-75500AD
1L Amber Bottles, deactivated*	EA	39-75L1AD
Netting for 250mL Bottle-Vac™	EA	29-59108
Netting for 500mL Bottle-Vac™	EA	29-59116
Netting for 1L Bottle-Vac™	EA	29-59132
Valve Caps, 125mL, (no valve)	EA	39-76044B
Valve Caps, 250, 500 or 1L, (no valve)	EA	39-76464

* These items require valves, caps, and netting to be ordered separately.

Bottle-Vac™ Sample Analysis

In the laboratory, analysis by loop injection requires either pressurizing to 3–7psig, or heating to 60–70˚C to increase the pressure to purge a loop. Bottle-Vac™ samplers can also be analyzed using a 7200 or 7100A Preconcentrator to withdraw a larger volume for low PPB analysis. Automated analysis can be performed using the 7650, 7410D, or 7032A Autosamplers.

Bottle-Vac™ Cleaning

Bottle-Vac™ samplers are reusable, making them less expensive per sampling event than other sampling devices, even Tedlar® bags. For PPB sampling, the bottles should be flushed with nitrogen or zero air in an oven after the fittings have been removed, then evacuated after the fittings are reattached. Fittings can be heated, flushed and stored under nitrogen in a separate container. For PPM sampling, the valves and bottles can simply be heated in an oven overnight with the fittings removed, then reassembled for immediate evacuation and delivery to the field. Bottle-Vacs™can also be easily cleaned on Entech's canister cleaning systems.

Applications – *(All Tedlar® Bag uses, plus:)*

- Indoor Air Quality
- Ceiling / STEL / TWA Monitoring
- Fugitive Emissions
- Landfill Gas / Soil Gas
- Fenceline Monitoring
- Breath Analysis
- Mold Detection *(MVOCs)*
- Impurities in Gases
- Stack Gas