PN: 29-MC600QT2
MiniCan™ Sampler

16 oz Bottle-Vac™ sampler

16 oz Bottles with Helium and low cost field caps

PN: 29-20500
Sampling Case (canisters, bottles, and samplers sold separately)

Indoor Air Quality / Mold MVOC Monitoring

MiniCans and Bottle-Vac™ samplers can be used to sample for both indoor air contaminants and for Microbial VOCs, or MVOCs. MVOCs are only found at elevated concentrations when there is live, growing mold present, which can in turn lead to higher concentrations of active, spore-bound micotoxins that have been shown to cause severe respiratory problems. The sample collection process for general indoor air contaminants, including solvents and BTEX, is identical to the collection process for MVOCs. The sample is sent to the field either under vacuum for traditional canister sampling, or “valve-less”, using a helium-filled bottle which exchanges rapidly with the room air when opened. This helium exchange technique makes for an ideal, low-cost sampling solution for non-technical personnel, such as home owners and office employees.

Vacuum Sampling

Vacuum sampling is the classical approach used for canister sampling, and is the more quantitative method as it allows validation of the sample vacuum prior to sample collection. Canisters or Bottle-Vac samplers are filled using a grab sampling technique (3-6 seconds) or a time-integrated technique (1-15 minutes) to allow a building sweep to be conducted for a more average sampling of the building. A wall sampler is also available for non-destructive evaluation of mold growth within wall space. Analysis is performed by preconcentration and GCMS. Heating of the MiniCan or Bottle-Vac sampler to 70 deg. C must be performed prior to analysis to insure recovery of the heavier MVOC fraction.

Helium Exchange Sampling

Helium exchange sampling is a low-cost way of collecting whole air samples. Bottle-Vac samplers are first cleaned and prepared using vacuum cleaning, and are then filled to just about atmospheric pressure with helium. While inverted, the cap and valve are quickly removed and replaced with a low-cost solid cap with Teflon liner. This is sent to the field, opened for 2-5 minutes by the user, closed, and sent back to the lab for analysis. In the lab, the solid cap is removed and replaced again with a cap and microvalve fitting in a low-VOC-contaminating environment to eliminate the effect of a 2-3% dilution. Analysis is performed as usual.

Unit	Part No.	Description
EA	29-MC600QT2	0.6L Canister with Micro Valve
EA	29-BV460A	16 oz Bottle-Vac™ Sampler
12	39-75460A	Box Amber 16 oz Bottles
EA	30-22630	Micro-QT™ Bottle-Vac Valve
144	39-76464	Bottle-Vac Cap (Valve Sold Separately)
144	39-76460	Solid Caps for Helium Exchange Sampling
EA	29-20500	15 Pos Bottle/MiniCan & Sampler Case

See Pg. 17 for more information on bottle and canister restricted samplers for 0.5 to 15 minute integrated sampling.