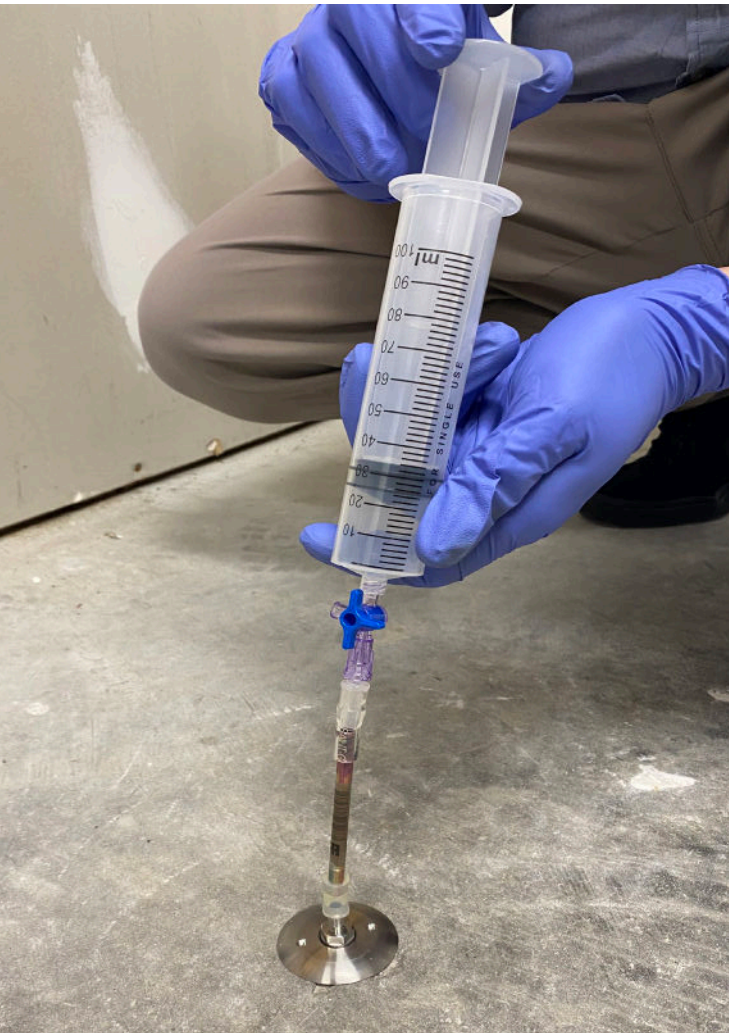


Global Leader in Soil Gas and Air Analyses

MULTI-BED SORBENT TUBES WITH LOW FLOW PUMPS OR SYRINGES

SORBENT TUBES ARE VERSATILE AND EASY TO USE



BENEFITS

- Rapidly collect data
- Expands the range of compounds that can be targeted
- Target chlorinated and petroleum-related compounds
- Target polynuclear aromatic hydrocarbons (PAHs)
- Very low detection limits with sampling pumps
- High resolution site maps when sampling soil vapor
- Easy-to-use BeSure Sample Collection Kit™



APPLICATIONS



Indoor Air
Sampling



Sub-Slab
Monitoring

Accurate and Easy-to-Use

Beacon Environmental can target a broad range of compounds using multi-bed sorbent tubes with low flow pumps or syringes to measure the concentration of VOCs and SVOCs in soil vapor or indoor air in accordance with EPA Method TO-15 and TO-17. Method TO-17 describes the procedures for collection of samples with sorbent tubes and Method TO-15 allows for the collection of samples by use of a canister or sorbent tube.

The use of sorbent tubes expands the capability of what compounds can be targeted in a vapor intrusion or indoor air assessment as compared to collecting samples with evacuated canisters. Data are reported in units of concentration (i.e., $\mu\text{g}/\text{m}^3$ or ppbv) with low-level detection limits in the sub ppbv range.

The use of sorbent tubes with a glass or even disposable syringe allows for low cost and easy sampling procedures to measure sub-slab soil vapor concentrations, while avoiding the need to use evacuated canisters and flow regulators.

MULTI-BED SORBENT TUBES WITH LOW FLOW PUMPS OR SYRINGES REPORTING LIMITS

COMPOUND	CAS	Units	Sample Volume (Liters)					
			0.1	0.5	1.0	5.0	10.0	50.0
Vinyl Chloride	75-01-4	ug/m ³	50.0	10.0	5.0	1.0	0.5	0.1
1,1-Dichloroethene	75-35-4	ug/m ³	50.0	10.0	5.0	1.0	0.5	0.1
Methylene Chloride	75-09-2	ug/m ³	50.0	10.0	5.0	1.0	0.5	0.1
1,1,2-Trichlorotrifluoroethane (Fr.113)	76-13-1	ug/m ³	50.0	10.0	5.0	1.0	0.5	0.1
trans-1,2-Dichloroethene	156-60-5	ug/m ³	50.0	10.0	5.0	1.0	0.5	0.1
Methyl-t-butyl ether	1634-04-4	ug/m ³	100.0	20.0	10.0	2.0	1.0	0.2
1,1-Dichloroethane	75-34-3	ug/m ³	50.0	10.0	5.0	1.0	0.5	0.1
cis-1,2-Dichloroethene	156-59-2	ug/m ³	50.0	10.0	5.0	1.0	0.5	0.1
Chloroform	67-66-3	ug/m ³	50.0	10.0	5.0	1.0	0.5	0.1
1,2-Dichloroethane	107-06-2	ug/m ³	50.0	10.0	5.0	1.0	0.5	0.1
1,1,1-Trichloroethane	71-55-6	ug/m ³	50.0	10.0	5.0	1.0	0.5	0.1
Cyclohexane	110-82-7	ug/m ³	50.0	10.0	5.0	1.0	0.5	0.1
Carbon Tetrachloride	56-23-5	ug/m ³	50.0	10.0	5.0	1.0	0.5	0.1
Benzene	71-43-2	ug/m ³	100.0	20.0	10.0	2.0	1.0	0.2
Trichloroethene	79-01-6	ug/m ³	50.0	10.0	5.0	1.0	0.5	0.1
1,4-Dioxane	123-91-1	ug/m ³	100.0	20.0	10.0	2.0	1.0	0.2
1,1,2-Trichloroethane	79-00-5	ug/m ³	50.0	10.0	5.0	1.0	0.5	0.1
Toluene	108-88-3	ug/m ³	100.0	20.0	10.0	2.0	1.0	0.2
1,2-Dibromoethane (EDB)	106-93-4	ug/m ³	50.0	10.0	5.0	1.0	0.5	0.1
Tetrachloroethene	127-18-4	ug/m ³	50.0	10.0	5.0	1.0	0.5	0.1
1,1,1,2-Tetrachloroethane	630-20-6	ug/m ³	50.0	10.0	5.0	1.0	0.5	0.1
Chlorobenzene	108-90-7	ug/m ³	50.0	10.0	5.0	1.0	0.5	0.1
Ethylbenzene	100-41-4	ug/m ³	100.0	20.0	10.0	2.0	1.0	0.2
p & m-Xylene	179601-23-1	ug/m ³	100.0	20.0	10.0	2.0	1.0	0.2
o-Xylene	95-47-6	ug/m ³	100.0	20.0	10.0	2.0	1.0	0.2
1,2,3-Trichloropropane	96-18-4	ug/m ³	100.0	20.0	10.0	2.0	1.0	0.2
Isopropylbenzene	98-82-8	ug/m ³	100.0	20.0	10.0	2.0	1.0	0.2
1,3,5-Trimethylbenzene	108-67-8	ug/m ³	100.0	20.0	10.0	2.0	1.0	0.2
1,2,4-Trimethylbenzene	95-63-6	ug/m ³	100.0	20.0	10.0	2.0	1.0	0.2
1,3-Dichlorobenzene	541-73-1	ug/m ³	100.0	20.0	10.0	2.0	1.0	0.2
1,4-Dichlorobenzene	106-46-7	ug/m ³	100.0	20.0	10.0	2.0	1.0	0.2
1,2-Dichlorobenzene	95-50-1	ug/m ³	100.0	20.0	10.0	2.0	1.0	0.2
1,2,4-Trichlorobenzene	120-82-1	ug/m ³	100.0	20.0	10.0	2.0	1.0	0.2
Naphthalene	91-20-3	ug/m ³	50.0	10.0	5.0	1.0	0.5	0.1
1,2,3-Trichlorobenzene	87-61-6	ug/m ³	100.0	20.0	10.0	2.0	1.0	0.2
1-Methylnaphthalene	90-12-0	ug/m ³	50.0	10.0	5.0	1.0	0.5	0.1
2-Methylnaphthalene	91-57-6	ug/m ³	50.0	10.0	5.0	1.0	0.5	0.1
Acenaphthene	83-32-9	ug/m ³	50.0	10.0	5.0	1.0	0.5	0.1
Acenaphthylene	208-96-8	ug/m ³	50.0	10.0	5.0	1.0	0.5	0.1
Biphenyl	92-52-4	ug/m ³	50.0	10.0	5.0	1.0	0.5	0.1
Dibenzofuran	132-64-9	ug/m ³	50.0	10.0	5.0	1.0	0.5	0.1
Fluorene	86-73-7	ug/m ³	50.0	10.0	5.0	1.0	0.5	0.1
TPH C5-C8		ug/m ³	25,000	5,000	2,500	500	250	50
TPH C9-C15		ug/m ³	21,500	4,300	2,150	430	215	43