

SKC

SKC introduces **ULTRA III** Passive Samplers the creative evolution of indoor and ambient air sampling.

The economical, convenient alternative to SUMMA canisters for EPA TO-15 sampling. Excellent sampling correlation in side-by-side studies with canisters. No cleaning and certification costs - Lower purchase price than canisters No expensive shipping - Easy on/off sampling - no flow controller or training required.

Available with choice of 5 sorbents to better target compounds for indoor and ambient air sampling including semi-volatile organic compounds.

- Carbograph 5
- Anasorb GCB1
- Tenax TA
- Chromosorb 106
- Charcoal (solvent extraction)

Passive sampler convenience combined with high sensitivity of thermal desorption.
Low ppb to ppt detection of organic vapors in ambient or indoor air. Solvent extraction model available.
Sliding cover for easy sampling, no pump required.
Rugged, lightweight miniature sampler

- Easy to transport
- Discreet sampling
- Sonically welded housing
- Validated sampling rates
- High capacity samplers
- Manufactured in an ultra-clean environment
- Sorbents undergo extensive cleaning and QC procedures
- Suitable for long-term sampling up to 30 days
- Ideal for vapor intrusion studies, including 7-day and 30-day sample times to reduce temporal variability in indoor air concentrations and improve risk estimates
- Lower sampling rates available for long-term studies with secondary diffusion barrier accessory

The patented* ULTRA III samples by diffusion and provides low ppb to ppt detection of compounds, including semi-volatile organic compounds (SVOCs).

ULTRA III Passive Samplers are an economical alternative to SUMMA canisters for EPA TO-15 sampling and show excellent sampling correlation in side-by-side studies with canisters.

Operation is as easy as sliding the cover open to start sampling and closing it to stop sampling. * U.S. Patent No. 6,607,581



Ultra III Passive Samplers prefilled with sorbent

Part Number	Description	Pack Size
690-101	Anasorb GCB1#	Pk/5
690-102	Carbograph 5#	Pk/5
690-103	Chromosorb 106#	Pk/5
690-104	Tenax TA#	Pk/5
690-300	Secondary Diffusion Barrier 12 Holes, lowers sampling rate for extended sampling time	1 each
690-302	Stand for indoor sampling	1 each
P226530	Thermal Desorption Tube Perkin Elmer, 0.25 x 3.5" includes screens and end caps	1 each

#Limited shelf life

Sampling Rates and Minimum Reporting Levels for Long-term sampling

Compound	Sampling Rate ml/min	Sampling Rate ml/min	Sampling Period/ Upper Limit (days)	Maximum recommended concentration (ppb)	Indoor # MRL* ($\mu\text{g}/\text{m}^3$)	Indoor# MRL* ($\mu\text{g}/\text{m}^3$)	Outdoor MRL#* ($\mu\text{g}/\text{m}^3$)	Outdoor MRL#* ($\mu\text{g}/\text{m}^3$)
	Indoor	Outdoor			1 Day	7 Days	1 Day	7 Days
Benzene	10.69	16.0	7	113	3.2	0.46	2.18	0.31
Perchloroethylene	10.02	13.1	7	73	0.24	0.034	0.18	0.026
Toluene	8.90	14.5	7	500	0.31	0.045	0.19	0.026
Trichloroethylene	11.47	14.9	7	82	0.16	0.023	0.12	0.018
o-Xylene	8.11	11.9	7	80	0.19	0.027	0.13	0.017

Sampling Rates and MRL's for Ultra III with Charcoal (Solvent Desorption)

Compound	Sampling Rate ml/min	Sampling Rate ml/min	Sampling Period/ Upper Limit (days)	Maximum recommended concentration (ppb)	Indoor # MRL* ($\mu\text{g}/\text{m}^3$)	Indoor# MRL* ($\mu\text{g}/\text{m}^3$)	Outdoor MRL#* ($\mu\text{g}/\text{m}^3$)	Outdoor MRL#* ($\mu\text{g}/\text{m}^3$)
	Indoor	Outdoor			7 Days	30 Days	7 Days	30 Days
Benzene	10.69	16.0	30	113	3.98	0.43	1.24	0.29
Ethyl Benzene	9.02	12.9	30	85	1.10	0.26	0.77	0.18
Toluene	8.90	14.5	30	500	1.12	0.26	0.69	0.16
Methyl tert-butyl ether	9.84	13.6	30	60	2.0	0.456	1.45	0.34
o-Xylene	8.11	11.9	30	80	1.22	0.29	0.83	0.195

Indoor- low velocity conditions (<5cm/sec), outdoor - greater than 5cm/sec

*MRL - minimum reporting level: These can vary with each laboratory, check with the laboratory.

Comparison of ULTRA III Passive Sampler and Canisters.

Side by side studies were performed using ULTRA III Passive Samplers with Anasorb GCB1 or CarboGraph 5 sorbent and SUMMA type canisters. Concentration results are reported below:

Compound	Ultra III ($\mu\text{g}/\text{m}^3$)	Canister ($\mu\text{g}/\text{m}^3$)
Benzene	0.77	0.69
	4.2	4.51
	1.98	1.98
	1.9	1.6
	6.3	6.8
Perchloroethylene	32.9	29.8
	1.1	1.62
	2.3	2.2
	2.85	2.6
	2.71	3.4
o-Xylene	1.17	0.91
	13.3	12.0
	7.55	7.9
	0.43	0.39
	1.3	1.0