

ULTRA III

The Creative Evolution of Indoor and Ambient Air Sampling

New, improved
ULTRA design —
only from SKC!

ULTRA III — Provides results comparable to canisters for EPA Method TO-15

The economical, convenient alternative to SUMMA canisters for EPA TO-15 sampling (*see data on pp. 2-3*)

- Excellent sampling correlation in side-by-side studies with canisters (*see data on reverse side*)
- 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 (*see data on page 3*)

- 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



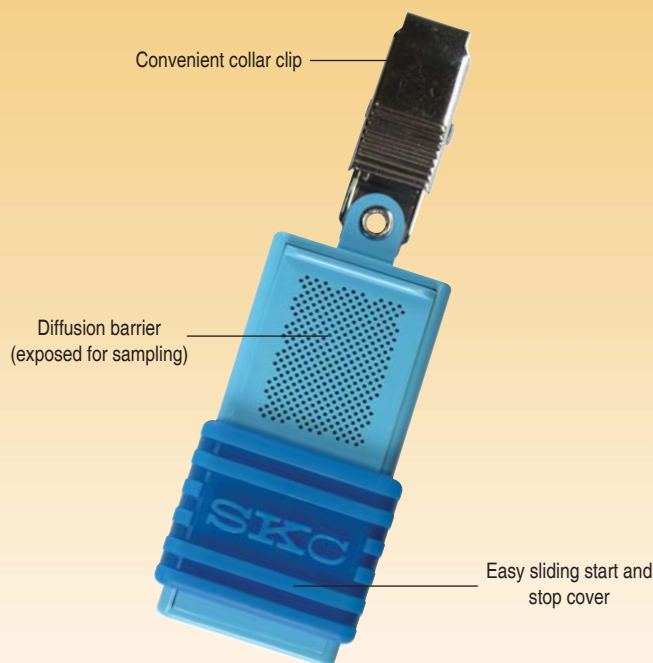
SKC introduces ULTRA III Passive Samplers — the creative evolution of indoor and ambient air sampling. The patented* ULTRA III samples by diffusion and provides low ppb to ppt detection of compounds, including semi-volatile organic compounds (SVOCs). ULTRA III Passive Samplers are an economical alternative to SUMMA canisters for EPA TO-15 sampling and show excellent sampling correlation in side-by-side studies with canisters (*see data on reverse side*). 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



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ULTRA III — Front view

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

Compound	ULTRA III ($\mu\text{g}/\text{m}^3$)	Canister ($\mu\text{g}/\text{m}^3$)
Perchloroethylene	32.9	29.8
	1.1	1.62
	2.3	2.2
	2.85	2.6
	2.71	3.4

Compound	ULTRA III ($\mu\text{g}/\text{m}^3$)	Canister ($\mu\text{g}/\text{m}^3$)
o-Xylene	1.17	0.91
	13.3	12.0
	7.55	7.9
	0.43	0.39
	1.3	1.0

See additional data on page 3.

Ordering

ULTRA III Passive Samplers prefilled with sorbent (pk/5):	Cat. No.
Anasorb GCB1 [‡] , 370 mg in each compartment	690-101
Carbograph 5 [‡] , 450 mg in each compartment	690-102
Chromosorb 106 [†] , 285 mg in each compartment	690-103
Tenax TA [#] , 265 mg in each compartment	690-104
Charcoal [#] , 500 mg in each compartment	690-105

Limited shelf-life

‡ Comparable to Carbopack B

† Go to www.osha.gov and search on ULTRA for additional information on sampling rates for Chromosorb 106.

Sampling Accessories	Cat. No.
Secondary Diffusion Barrier, 12 holes, lowers sampling rate for extended sampling time	690-300
Stand for Indoor Sampling	690-302

Analysis Accessory	Cat. No.
Thermal Desorption Tube, Perkin Elmer, 0.25 x 3.5 inches, includes screens and end caps	P226530

SKC Limited Warranty and Return Policy

SKC products are subject to the SKC Limited Warranty and Return Policy, which provides SKC's sole liability and the buyer's exclusive remedy. To view the complete SKC Limited Warranty and Return Policy, go to <http://www.skcinc.com/warranty.asp>.



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Sampling Rates and Minimum Reporting Levels for Long-term Sampling

Sampling Rates and MRLs* for ULTRA III with Carbograph 5 (Thermal Desorption)

Compound	Sampling Rate (ml/min)		Sampling Period/ Upper Limit (days)	Maximum Recommended Concentration (ppb)	Indoor† MRL* ($\mu\text{g}/\text{m}^3$)		Outdoor MRL* ($\mu\text{g}/\text{m}^3$)	
	Indoor	Outdoor			1 Day	7 Day	1 Day	7 Day
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

* MRL — minimum reporting level: These can vary with each laboratory; check with the laboratory.

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

Sampling Rates and MRLs* for ULTRA III with Charcoal (Solvent Desorption)

Compound	Sampling Rate (ml/min)		Sampling Period/ Upper Limit (days)	Maximum Recommended Concentration (ppb)	Indoor† MRL* ($\mu\text{g}/\text{m}^3$)		Outdoor MRL* ($\mu\text{g}/\text{m}^3$)	
	Indoor	Outdoor			7 Day	30 Day	7 Day	30 Day
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

* MRL — minimum reporting level: These can vary with each laboratory; check with the laboratory.

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

