



CHROMATOGRAPHIC SPECIALTIES INC.

When should I use solvent desorption (thermal desorption) vs. other air sampling techniques?

Please refer to the following table for a comparison of the advantages and disadvantages of canisters, gas sampling bags, and solvent desorption tubes (thermal desorption tubes).

	Canister	Gas Sampling Bag	Solvent/Thermal Desorption Tubes
Media Type	Whole air	Whole air	Adsorption
Sensitivity	ppt-ppb	ppb-ppm	ppb-ppm
Technique	Passive (no pump)	Active	Active/passive
Sample Type	Grab or integrated	Grab or integrated	Grab or integrated
Analyte	Wide range of VOCs & permanent gases	Wide range of VOCs & permanent gases	Sorbent Specific
Applications	Ambient, IAQ, emergency response, IH	Ambient, IAQ, emission	Ambient, IAQ, IH
Durability	Reusable	One time use	Solvent: one-time use; thermal: reusable (performance is solvent specific)
Inertness	Excellent	Fair	Fair
Stability	30 Days	48 Hours	Varies by analyte
Sample Volume	0.4 - 15L	0.5 -10L	Varies by analyte
Sampling Type	Seconds to Days	Minutes to Hours	Minutes to Hours

