

Capabilities comparison of *ALTEF* and Multi-Layer Foil gas sampling bags Based on commonly sampled chemical compounds

Sulfur Compounds

Compound	Recommended sampling bag material	
	<i>ALTEF</i>	Multi-Layer Foil
n-Butyl mercaptan		
tert-Butyl mercaptan		
Carbon disulfide†		
Carbonyl sulfide		
Diethyl disulfide		
Diethyl sulfide†		
Dimethyl disulfide		
Dimethyl sulfide†		
2,5-Dimethylthiophene		
Ethyl mercaptan†		
Ethyl methyl sulfide†		
2-Ethylthiophene		
Hydrogen Sulfide		
Isobutyl mercaptan†		
Isopropyl mercaptan†		
3-Methylthiophene		
Methyl mercaptan†		
n-Propyl mercaptan†		
Tetrahydrothiophene		
Thiophene†		

Color Code:

Red: Not suitable

Dark Green: Recommended

Light Green: Suitable when used as recommended

† - *ALTEF* bags can be used to sample these sulfur compounds if sample is analyzed within 24 hours.

†† - Multi-Layer Foil bags can be used to sample most VOCs but are not recommended for collecting low ppm to high ppb VOCs due to background levels from bag materials.

ALTEF bags are recommended for most VOCs, if analyzed within 48 hours, and for many sulfur compounds, if analyzed within 24 hours.

Multi-Layer Foil bags are recommended for Methane (CH₄), Hydrogen Sulfide (H₂S), Carbon Monoxide (CO), and Carbon Dioxide (CO₂), if analyzed within 48 hours.

VOCs

Compound	Recommended sampling bag material	
	<i>ALTEF</i>	Multi-Layer Foil††
Acetone		
Acetonitrile		
Acrylonitrile		
Allyl chloride		
Benzene		
Bromoethane		
Butyl Acetate		
Carbon tetrachloride		
Chloroform		
Carbon dioxide		
Carbon monoxide		
1,2-Dichloroethane		
Dichloropropane		
Ethyl acetate		
Ethylene		
Heptane		
Hexane		
Isooctane		
Isopropyl alcohol		
Methane		
Methyl ethyl ketone		
Methylene chloride		
Methyl tert-butyl ether		
Octane		
Perchloroethylene		
Propylene		
Propylene oxide		
Tetrahydrofuran		
Toluene		
1,1,1-Trichloroethane		
Trichloroethylene		
Vinylidene chloride		
p-Xylene		