

METHOD 5041

*Sara  
pg 33  
units*

Protocol for Analysis of Sorbent Cartridges from  
Volatile Organic Sampling Train:  
Wide-bore Capillary Column Technique

1.0 SCOPE AND APPLICATION

1.1 This method describes the analysis of volatile principal organic hazardous constituents (POHCs) collected from the stack gas effluents of hazardous waste incinerators using the VOST methodology (1). For a comprehensive description of the VOST sampling methodology see Method 0030. The following compounds may be determined by this method:

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Analyte

CAS Number

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acetone  
acrylonitrile  
benzene  
bromochloromethane  
bromodichloromethane  
4-bromofluorobenzene  
bromoform  
bromomethane  
carbon disulfide  
carbon tetrachloride  
chlorobenzene  
chlorodibromomethane  
chloroethane  
chloroform  
chloromethane  
dibromomethane  
1,1-dichloroethane  
1,2-dichloroethane  
1,1-dichloroethene  
trans-1,2-dichloroethene  
1,2-dichloropropane  
cis-1,3-dichloropropene  
trans-1,3-dichloropropene  
1,4-difluorobenzene  
ethylbenzene  
iodomethane  
methylene chloride  
styrene  
1,1,2,2-tetrachloroethane  
tetrachloroethene  
toluene

TABLE 2. PRELIMINARY INSTRUMENT DETECTION LIMITS FOR VOLATILE ORGANICS ANALYZED BY THE VOST METHODOLOGY\*

Compound	CAS Number	Detection Limit, ng
chloromethane	74-87-3	58
bromomethane	74-83-9	26
vinyl chloride	75-01-4	14
chloroethane	75-00-3	21
methylene chloride	75-09-2	9
acetone	67-64-1	35
carbon disulfide	75-15-0	11
1,1-dichloroethene	75-35-4	14
1,1-dichloroethane	75-35-3	12
trans-1,2-dichloroethene	156-60-5	11
chloroform	67-66-3	11
1,2-dichloroethane	107-06-2	13
1,1,1-trichloroethane	71-55-6	8
carbon tetrachloride	56-23-5	8
bromodichloromethane	75-27-4	11
1,1,2,2-tetrachloroethane	79-34-5	23
1,2-dichloropropane	78-87-5	12
trans-1,3-dichloropropene	10061-02-6	17
trichloroethene	79-01-6	11
dibromochloromethane	124-48-1	21
1,1,2-trichloroethane	79-00-5	26
benzene	71-43-2	26
cis-1,3-dichloropropene	10061-01-5	27
bromoform	75-25-2	26
tetrachloroethene	127-18-4	11
toluene	108-88-3	15
chlorobenzene	108-90-7	15
ethylbenzene	100-41-4	21
styrene	100-42-5	46
trichlorofluoromethane	75-69-4	17
iodomethane	74-88-4	9
acrylonitrile	107-13-1	13

(Continued)