

SKC Environmental Sampling Guide for Active and Passive Methods

The easy-to-use SKC Environmental Sampling Guide provides a quick reference for the user to determine method parameters and active and passive collection media that meet the specifications for each method.

SKC Method Updates

SKC has published updates to the following methods:

- **EPA Method IP-6 (Formaldehyde and Other Aldehydes)**, an active method to which SKC added the UME^X 100 as a passive alternative (www.skcinc.com/instructions/IP6A.pdf)
- **EPA Method IP-10A (Particulate Matter, Indoor Air)**, a method specifying a single-stage impactor to which SKC added the four-stage Sioutas Impactor for coarse, fine, and ultrafine particles (www.skcinc.com/instructions/IP10A.pdf)
- **EPA Method TO-17 (VOCs in Ambient or Indoor Air)**, an active method to which SKC added the ULTRA samplers as a passive alternative (www.skcinc.com/instructions/1667.pdf)

Chemical Fact Files

The Chem F File column contains numbers that correspond to specific Chemical Fact Files for Environmental Sampling. These single-page publications are simple abstracts of EPA air sampling methods that expand upon the information that appears in this Guide (*see page 197 for more information on Chemical Fact Files*).

The SKC Environmental Sampling Guide is a reference only to assist users in finding the method, sampling equipment, and sampling media for a specific compound. The information in the Sampling Guide is not to be construed as a substitute for any sampling method. Users must consult the appropriate sampling method for the compound of interest before sampling.

Chemical Hazard	Sampling Environment	Agency Method	Chem F File	Flow/Sampling Rate †	Sample Time or Air Volume	Analysis	SKC Collection Media and Page No.								
Acetic acid	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST	226-300 Series	41	TH	224-26-02	47	CPC	224-26CPC-10	47
Acetone	Ambient	Internal		15.2 ml/min	1-12 hrs	SE, GC	PS	690-105	or PS	575-001	65				
Acetonitrile	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST	226-300 Series	41	TH	224-26-02	47	CPC	224-26CPC-10	47
Acrylonitrile	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST	226-300 Series	41	TH	224-26-02	47	CPC	224-26CPC-10	47
Acrylonitrile	Ambient	Internal		20.4 ml/min	1-12 hrs	SE, GC	PS	575-001	or PS	690-105	71				
Acrylonitrile	Ambient	Internal		20.4 ml/min	8-24 hrs	TD, GC £	PS	690-102	71						
Aldehydes	Ambient	EPA TO-5	1671	100-1000 ml/min	< 80 L	HPLC-UV	IMP	225-36-1	59	IT	225-22	59			
Benzene	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST	226-300 Series	41	TH	224-26-02	47	CPC	224-26CPC-10	47
Benzene	Ambient	EPA TO-17	1689	16.0 ml/min	8-24 hrs	TD, GC £	PS	690-101	71						
Benzene	Ambient	EPA TO-17	1689	0.83 ml/min	1-7 days	TD, GC £	PS	690-102	with PS	690-300	71				
Benzene	Ambient	EPA TO-17	1689	16.0 ml/min	8 hrs-7 days	TD, GC £	PS	690-102	71						
Benzene	Ambient	Internal		16.0 ml/min	7-30 days	SE, GC	PS	575-001	or PS	690-105	71				
2-Butanone	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST	226-300 Series	41	TH	224-26-02	47	CPC	224-26CPC-10	47
2-Butanone	Ambient	Internal		16.88 ml/min	1-12 hrs	SE, GC	PS	690-105	or PS	575-001	65				
2-Butoxyethanol acetate	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST	226-300 Series	41	TH	224-26-02	47	CPC	224-26CPC-10	47
n-Butyl acetate	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST	226-300 Series	41	TH	224-26-02	47	CPC	224-26CPC-10	47
n-Butyl acetate	Ambient	EPA TO-17	1689	12.6 ml/min	8-24 hrs	TD, GC £	PS	690-102	71						
n-Butyl acetate	Ambient	Internal		12.6 ml/min	1-12 hrs	SE, GC	PS	690-105	or PS	575-001	65				
t-Butyl acetate	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST	226-300 Series	41	TH	224-26-02	47	CPC	224-26CPC-10	47
t-Butyl acetate	Ambient	EPA TO-17	1689	12.9 ml/min	8-24 hrs	TD, GC £	PS	690-102	71						
n-Butyl alcohol	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST	226-300 Series	41	TH	224-26-02	47	CPC	224-26CPC-10	47
t-Butyl methyl ether (MTBE)	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST	226-300 Series	41	TH	224-26-02	47	CPC	224-26CPC-10	47
t-Butyl methyl ether (MTBE)	Ambient	Internal		13.6 ml/min	1-30 days	SE, GC	PS	690-105	or PS	575-001	65				

See page 196 for abbreviations.

Chemical Hazard	Sampling Environment	Agency Method	Chem F File	Flow/Sampling Rate †	Sample Time or Air Volume	Analysis	SKC Collection Media and Page No.								
Carbon tetrachloride	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST	226-300 Series	41	TH	224-26-02	47	CPC	224-26CPC-10	47
Carbon tetrachloride	Ambient	Internal		14.1 ml/min	1-8 hrs	SE, GC	PS	690-105		or PS	575-001	65			
Chlorobenzene	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST	226-300 Series	41	TH	224-26-02	47	CPC	224-26CPC-10	47
Chlorobenzene	Ambient	EPA TO-17	1689	18.7 ml/min	8-24 hrs	TD, GC £	PS	690-102	71						
Chlorobenzene	Ambient	Internal		18.7 ml/min	1-8 hrs	SE, GC	PS	690-105		or PS	575-001	65			
Cresols	Ambient	EPA TO-8	1668	100-1000 ml/min	< 80 L	HPLC-UV	IMP	225-36-1‡	59	IT	225-22	59			
Cumene	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST	226-300 Series	41	TH	224-26-02	47	CPC	224-26CPC-10	47
Cumene	Ambient	EPA TO-17	1689	12.8 ml/min	8-24 hrs	TD, GC £	PS	690-104	71						
Cumene	Ambient	Internal		12.8 ml/min	1-8 hrs	SE, GC	PS	690-105		or PS	575-001	65			
Cyclohexanone	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST	226-300 Series	41	TH	224-26-02	47	CPC	224-26CPC-10	47
Cyclohexanone	Ambient	EPA TO-17	1689	15.6 ml/min	8-24 hrs	TD, GC £	PS	690-102	71						
Cyclohexanone	Ambient	Internal		15.6 ml/min	1-8 hrs	SE, GC	PS	690-105		or PS	575-001	65			
n-Decane	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST	226-300 Series	41	TH	224-26-02	47	CPC	224-26CPC-10	47
n-Decane	Ambient	EPA TO-17	1689	10.2 ml/min	8-24 hrs	TD, GC £	PS	690-104	71						
n-Decane	Ambient	Internal		10.2 ml/min	1-8 hrs	SE, GC	PS	690-105		or PS	575-001	65			
1,2-Dichloroethane	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST	226-300 Series	41	TH	224-26-02	47	CPC	224-26CPC-10	47
1,2-Dichloroethane	Ambient	EPA TO-17	1689	10.3 ml/min	8-24 hrs	TD, GC £	PS	690-102	71						
1,2-Dichloroethane	Ambient	Internal		14.2 ml/min	1-12 hrs	SE, GC	PS	690-105		or PS	575-001	65			
Dichloromethane (methylene chloride)	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST	226-300 Series	41	TH	224-26-02	47	CPC	224-26CPC-10	47
Dichloromethane (methylene chloride)	Ambient	EPA TO-17	1689	14.7 ml/min	4-8 hrs	TD, GC £	PS	690-102	81						
Dichloromethane (methylene chloride)	Ambient	Internal		14.7 ml/min	1 hr-3 days	SE, GC	PS	690-105		or PS	575-001	65			
Dichloromethane (methylene chloride)	Ambient	Internal		0.99 ml/min	7 days	SE, GC	PS	690-105		with PS	690-300	71			
Dioxin (including, PHDDs, PCDDs, PBDDs)	Ambient	EPA TO-9A	1673	200-280 L/min	24 hrs	HRGC-HRMS	PUF	226-131	43	FLT	225-1821	43			
n-Dodecane	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST	226-300 Series	41	TH	224-26-02	47	CPC	224-26CPC-10	47
Ethanol	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST	226-300 Series	41	TH	224-26-02	47	CPC	224-26CPC-10	47
Ethanol	Ambient	Internal		20.0 ml/min	1-8 hrs	SE, GC	PS	690-105		or PS	575-002	65			
2-Ethoxyethanol	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST	226-300 Series	41	TH	224-26-02	47	CPC	224-26CPC-10	47
2-Ethoxyethyl acetate	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST	226-300 Series	41	TH	224-26-02	47	CPC	224-26CPC-10	47
Ethyl acetate	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST	226-300 Series	41	TH	224-26-02	47	CPC	224-26CPC-10	47
Ethyl acetate	Ambient	EPA TO-17	1689	13.1 ml/min	8-24 hrs	TD, GC £	PS	690-102	71						
Ethyl acetate	Ambient	Internal		13.1 ml/min	1-8 hrs	SE, GC	PS	690-105		or PS	575-001	65			
Ethyl acrylate	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST	226-300 Series	41	TH	224-26-02	47	CPC	224-26CPC-10	47
Ethyl acrylate	Ambient	EPA TO-17	1689	13.7 ml/min	8-24 hrs	TD, GC £	PS	690-102	71						
Ethyl acrylate	Ambient	Internal		13.7 ml/min	1-12 hrs	SE, GC	PS	690-105		or PS	575-002	65			
Ethyl alcohol	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST	226-300 Series	41	TH	224-26-02	47	CPC	224-26CPC-10	47
Ethyl alcohol	Ambient	Internal		20.0 ml/min	1-8 hrs	SE, GC	PS	690-105		or PS	575-002	65			
Ethyl benzene	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST	226-300 Series	41	TH	224-26-02	47	CPC	224-26CPC-10	47
Ethyl benzene	Ambient	EPA TO-17	1689	12.9 ml/min	8-24 hrs	TD, GC £	PS	690-101	71						
Ethyl benzene	Ambient	EPA TO-17	1689	12.9 ml/min	8 hrs-7 days	TD, GC £	PS	690-102	71						
Ethyl benzene	Ambient	Internal		12.9 ml/min	7-30 days	SE, GC	PS	690-105		PS	575-001				

See page 196 for abbreviations.

Chemical Hazard	Sampling Environment	Agency Method	Chem F File	Flow/Sampling Rate †	Sample Time or Air Volume	Analysis	SKC Collection Media and Page No.						
2-Ethyl toluene	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47				
3-Ethyl toluene	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47				
4-Ethyl toluene	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47				
Ethylene dichloride	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47				
Ethylene dichloride	Ambient	EPA TO-17	1689	14.2 ml/min	8 hrs-24 hrs	TD, GC £	PS 690-102	71					
Formaldehyde	Ambient	EPA TO-11A	1082	100-2000 ml/min	varies	HPLC-UV	ST 226-119	or ST 226-120	37				
Formaldehyde	Ambient (outdoor)	EPA TO-11A	1082	28.6 ml/min	15 min-24 hrs	HPLC-UV	PS 500-100	67					
Formaldehyde	Ambient (outdoor)	EPA TO-11A	1082	28.6 ml/min	15 min-8 hrs	HPLC-UV	PS 500-100	67					
Formaldehyde	Ambient (outdoor)	EPA TO-11A	1082	28.6 ml/min	7 days	HPLC-UV	PS 500-100	67					
Formaldehyde	Indoor	EPA IP-6A	1664	100-1000 ml/min	5 min-24 hrs	HPLC-UV	ST 226-119	or ST 226-120	37				
Formaldehyde	Indoor	EPA IP-6C	1664	20.4 ml/min	1-7 days	HPLC-UV	PS 500-100	67					
Formaldehyde	Indoor	EPA IP-6C	1664	20.4 ml/min	15 min-8 hrs	HPLC-UV	PS 500-100	67					
Formaldehyde	Indoor	EPA IP-6C	1664	20.4 ml/min	7 days	HPLC-UV	PS 500-100	86					
Furans (including PHDFs, PCDFs, PBDFs)	Ambient	EPA TO-9A	1673	200-280 L/min	24 hrs	HRGC-HRMS	PUF 226-131	43	FLT 225-1821	43			
Furfural	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47				
n-Heptane	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47				
n-Heptane	Ambient	EPA TO-17	1689	13.9 ml/min	8-24 hrs	TD, GC £	PS 690-102	71					
n-Heptane	Ambient	Internal		13.9 ml/min	1-12 hrs	SE, GC	PS 690-105	or PS 575-001	65				
n-Hexane	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47				
n-Hexane	Ambient	Internal		14.3 ml/min	1-12 hrs	SE, GC	PS 690-105	or PS 575-001	65				
Hexone	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47				
Isobutanol (isobutyl alcohol)	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47				
Isobutyl acetate	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47				
Isobutyl alcohol (isobutanol)	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47				
Isophorone	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47				
Isopropanol	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47				
Isopropanol	Ambient	EPA TO-17	1689	20.0 ml/min	8-24 hrs	TD, GC £	PS 690-102	71					
Isopropanol	Ambient	Internal		20.0 ml/min	1-8 hrs	SE, GC	PS 690-105	or PS 575-002	65				
Isopropyl acetate	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47				
Isopropyl alcohol	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47				
Isopropyl alcohol	Ambient	EPA TO-17	1689	20.0 ml/min	8-24 hrs	TD, GC £	PS 690-102	71					
Isopropyl alcohol	Ambient	Internal		20.0 ml/min	1-8 hrs	SE, GC	PS 690-105	or PS 575-002	65				
Isopropyl benzene	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47				
Ketones	Ambient	EPA TO-5	1671	100-1000 ml/min	< 80 L	HPLC-UV	IMP 225-36-1	59	IT 225-22	59			
Maleic anhydride	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47				
Mesitylene	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47				
Methanol	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47				
2-Methoxyethanol	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47				
2-Methoxyethyl acetate	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47				
Methoxypropanol	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47				
Methyl acetate	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47				
Methyl acrylate	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47				

See page 196 for abbreviations.

Chemical Hazard	Sampling Environment	Agency Method	Chem F File	Flow/Sampling Rate †	Sample Time or Air Volume	Analysis	SKC Collection Media and Page No.					
Methyl acrylate	Ambient	EPA TO-17	1689	15.7 ml/min	8-24 hrs	TD, GC £	PS 690-102	71				
Methyl acrylate	Ambient	Internal		15.7 ml/min	1-12 hrs	SE, GC	PS 690-105	or PS 575-002	65			
Methyl alcohol	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02	47	CPC 224-26CPC-10	47	
Methyl chloroform	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02	47	CPC 224-26CPC-10	47	
Methyl ethyl ketone	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02	47	CPC 224-26CPC-10	47	
Methyl ethyl ketone	Ambient	Internal		16.9 ml/min	1-12 hrs	SE, GC	PS 690-105	or PS 575-002	65			
Methyl isobutyl ketone	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02	47	CPC 224-26CPC-10	47	
Methyl isobutyl ketone	Ambient	EPA TO-17	1689	13.5 ml/min	8-24 hrs	TD, GC £	PS 690-102	71				
Methyl isobutyl ketone	Ambient	Internal		13.5 ml/min	1-8 hrs	SE, GC	PS 690-105	or PS 575-002	65			
Methyl methacrylate	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02	47	CPC 224-26CPC-10	47	
Methyl methacrylate	Ambient	EPA TO-17	1689	13.1 ml/min	8-24 hrs	TD, GC £	PS 690-102	71				
Methyl methacrylate	Ambient	Internal		13.1 ml/min	1-8 hrs	SE, GC	PS 690-105	or PS 575-002	65			
Methyl styrene	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02	47	CPC 224-26CPC-10	47	
Methyl styrene	Ambient	EPA TO-17	1689	12.3 ml/min	8-24 hrs	TD, GC £	PS 690-104	71				
Methyl styrene	Ambient	Internal		12.3 ml/min	1-8 hrs	SE, GC	PS 690-105	or PS 575-001	65			
1-Methyl-2-ethyl benzene	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02	47	CPC 224-26CPC-10	47	
1-Methyl-3-ethyl benzene	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02	47	CPC 224-26CPC-10	47	
1-Methyl-4-ethyl benzene	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02	47	CPC 224-26CPC-10	47	
Methyl-t-butyl-ether (MTBE)	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02	47	CPC 224-26CPC-10	47	
Methyl-t-butyl-ether (MTBE)	Ambient	Internal		13.6 ml/min	1-30 days	SE, GC	PS 690-105	or PS 575-001	65			
Methylene chloride (dichloromethane)	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02	47	CPC 224-26CPC-10	47	
Methylene chloride (dichloromethane) (see dichloromethane)	Ambient	EPA TO-17	1689	14.7 ml/min	4-8 hrs	TD, GC £	PS 690-102	71				
Methylene chloride (dichloromethane) (see dichloromethane)	Ambient	Internal		0.99 ml/min	7 days	SE, GC	PS 690-105	with PS 690-300	71			
Methylene chloride (dichloromethane)(see dichloromethane)	Ambient	Internal		14.7 ml/min	8 hrs-3 days	SE, GC	PS 690-105	or PS 575-001	65			
Methylphenols	Ambient	EPA TO-8	1668	100-1000 ml/min	< 80 L	HPLC-UV	IMP 225-36-1‡	59	IT 225-22	59		
Nitrobenzene	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02	47	CPC 224-26CPC-10	47	
Nonane	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02	47	CPC 224-26CPC-10	47	
Nonane	Ambient	EPA TO-17	1689	10.6 ml/min	8-24 hrs	TD, GC £	PS 690-104	71				
Nonane	Ambient	Internal		10.6 ml/min	1-8 hrs	SE, GC	PS 690-105	or PS 575-001	65			
n-Octane	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02	47	CPC 224-26CPC-10	47	
n-Octane	Ambient	EPA TO-17	1689	12.7 ml/min	8-24 hrs	TD, GC £	PS 690-104	71				
n-Octane	Ambient	Internal		12.7 ml/min	1-8 hrs	SE, GC	PS 690-105	or PS 575-001	65			
Octanol	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02	47	CPC 224-26CPC-10	47	
Octyl alcohol	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02	47	CPC 224-26CPC-10	47	
PCBs (polychlorinated biphenyls)	Ambient	EPA TO-4A	1670	200-280 L/min	24 hrs	varies	PUF 226-131	43	FLT 225-1821	43		
n-Pentane	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02	47	CPC 224-26CPC-10	47	
n-Pentane	Ambient	Internal		14.9 ml/min	1-8 hrs	SE, GC	PS 690-105	or PS 575-001	65			
Perchloroethylene	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02	47	CPC 224-26CPC-10	47	
Perchloroethylene	Ambient	EPA TO-17	1689	13.1 ml/min	8-24 hrs	TD, GC £	PS 690-102	or PS 690-101	71			
Perchloroethylene	Ambient	Internal		0.563 ml/min	1-7 days	TD, GC £	PS 690-101	or PS 690-102	with PS 690-300			
Perchloroethylene	Ambient	Internal		13.1 ml/min	1-30 days	SE, GC	PS 690-105	or PS 575-001	65			

See page 196 for abbreviations.

Chemical Hazard	Sampling Environment	Agency Method	Chem F File	Flow/Sampling Rate †	Sample Time or Air Volume	Analysis	SKC Collection Media and Page No.				
Perchloroethylene	Indoor	EPA IP-1B	1689	13.1 ml/min	8-24 hrs	TD, GC £	PS 690-102	or PS 690-101	71		
Pesticides	Ambient	EPA TO-10A	1675	1-5 L/min	4-24 hrs	GC-ECD	PUF 226-92	or PUF 226-124	42		
Pesticides	Indoor	EPA IP-8	1675	1-5 L/min	4-24 hrs	GC-ECD	PUF 226-92	or PUF 226-124	42		
Pesticides, organochlorine	Ambient	EPA TO-4A	1670	200-280 L/min	24 hrs	varies	PUF 226-131	43	FLT 225-1821	43	
Phenol	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series	41	TH 224-26-02	47	CPC 224-26CPC-10 47
Phenol	Ambient	EPA TO-8	1668	100-1000 ml/min	< 80 L	HPLC-UV	IMP 225-36-1†	59	IT 225-22	59	
Phosgene	Ambient	EPA TO-6	1669	100-1000 ml/min	< 50 L	HPLC-UV	IMP 225-36-1	59	IT 225-22	59	
PM2.5	Indoor	EPA IP-10A	1663	9 L/min	24 hrs	GR	CI 225-370	100	FLT 225-2708	100	FLT 225-1709 74
PM2.5	Indoor	EPA IP-10A	1663	10 L/min	24 hrs	GR	PEM 761-203B	98	FLT 225-1709	74	
Polycyclic aromatic hydrocarbons (PAHs)	Ambient	EPA TO-13A	1672	220 L/min	24 hrs	GC-MS	PUF 226-131	43	FLT 225-1821	43	
Polycyclic aromatic hydrocarbons (PAHs)	Indoor	EPA IP-7		20 L/min	30,000 L	GC-FID, MS, HPLC	PUF 226-131	43	FLT 225-1821	43	
n-Propanol	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series	41	TH 224-26-02	47	CPC 224-26CPC-10 47
Propionitrile	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series	41	TH 224-26-02	47	CPC 224-26CPC-10 47
n-Propyl acetate	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series	41	TH 224-26-02	47	CPC 224-26CPC-10 47
Propyl alcohol	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series	41	TH 224-26-02	47	CPC 224-26CPC-10 47
n-Propyl benzene	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series	41	TH 224-26-02	47	CPC 224-26CPC-10 47
Pyridine	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series	41	TH 224-26-02	47	CPC 224-26CPC-10 47
Styrene	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series	41	TH 224-26-02	47	CPC 224-26CPC-10 47
Styrene	Ambient	EPA TO-17	1689	13.7 ml/min	8-24 hrs	TD, GC £	PS 690-102	71			
Styrene	Ambient	Internal		13.7 ml/min	1-8 hrs	SE, GC	PS 690-105	or PS 575-001	65		
Styrene	Ambient	OSHA 1014		13.6 ml/min	1-8 hrs	SE, GC	PS 575-006	65			
1,1,1,2-Tetrachloroethane	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series	41	TH 224-26-02	47	CPC 224-26CPC-10 47
1,1,2,2-Tetrachloroethane	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series	41	TH 224-26-02	47	CPC 224-26CPC-10 47
1,1,2,2-Tetrachloroethane	Ambient	EPA TO-17	1689	11.8 ml/min	8-24 hrs	TD, GC £	PS 690-102	or PS 690-104	71		
1,1,2,2-Tetrachloroethane	Ambient	Internal		11.8 ml/min	8 hrs	SE, GC	PS 690-105	or PS 575-001	65		
Tetrachloroethylene	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series	41	TH 224-26-02	47	CPC 224-26CPC-10 47
Tetrachloroethylene	Ambient	EPA TO-17	1689	13.1 ml/min	8-24 hrs	TD, GC £	PS 690-102	or PS 690-101	71		
Tetrachloroethylene	Ambient	Internal		0.563 ml/min	1-7 days	TD, GC £	PS 690-101	or PS 690-102	with PS 690-300		
Tetrachloroethylene	Ambient	Internal		13.1 ml/min	1-30 days	SE, GC	PS 690-105	or PS 575-001	65		
Tetrachloroethylene	Indoor	EPA IP-1B	1689	13.1 ml/min	8-24 hrs	TD, GC £	PS 690-102	or PS 690-101	71		
Toluene	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series	41	TH 224-26-02	47	CPC 224-26CPC-10 47
Toluene	Ambient	EPA TO-17	1689	14.5 ml/min	8-24 hrs	TD, GC £	PS 690-101	or PS 690-102	71		
Toluene	Ambient	Internal		14.5 ml/min	1-30 days	SE, GC	PS 690-105	or PS 575-001	65		
1,1,1-Trichloroethane	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series	41	TH 224-26-02	47	CPC 224-26CPC-10 47
1,1,1-Trichloroethane	Ambient	Internal		14.1 ml/min	1-8 hrs	SE, GC	PS 690-105	or PS 575-001	65		
1,1,2-Trichloroethane	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series	41	TH 224-26-02	47	CPC 224-26CPC-10 47
1,1,2-Trichloroethane	Ambient	Internal		12.5 ml/min	1-8 hrs	SE, GC	PS 690-105	or PS 575-001	65		
Trichloroethylene	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series	41	TH 224-26-02	47	CPC 224-26CPC-10 47
Trichloroethylene	Ambient	EPA TO-17	1689	14.9 ml/min	8-24 hrs	TD, GC £	PS 690-102	71			
Trichloroethylene	Ambient	Internal		14.9 ml/min	1-8 hrs	SE, GC	PS 690-105	or PS 575-001	65		
1,2,4-Trimethylbenzene	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series	41	TH 224-26-02	47	CPC 224-26CPC-10 47
1,3,5-Trimethylbenzene	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series	41	TH 224-26-02	47	CPC 224-26CPC-10 47

See page 196 for abbreviations.

Chemical Hazard	Sampling Environment	Agency Method	Chem F File	Flow/Sampling Rate †	Sample Time or Air Volume	Analysis	SKC Collection Media and Page No.					
3,5,5-Trimethylcyclohex-2-enone (isophorone)	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47			
n-Undecane	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47			
Vinyl toluene	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47			
Volatile organic compounds (VOCs) (canister)	Ambient	EPA TO-14A	1676	varies	varies	GC-MS	CAN 228 Series	PK 228 Series				
Volatile organic compounds (VOCs) (canister)	Ambient	EPA TO-15	1676	varies	varies	GC-MS	CAN 228 Series	PK 228 Series				
Volatile organic compounds (VOCs) (canister)	Indoor	EPA IP-1A	1676	varies	varies	GC-MS	CAN 228 Series	PK 228 Series				
Volatile organic compounds (VOCs) (sample bag)	Stack Gas	EPA 0040	1665	250-1000 ml/min	1-2 hrs	GC-MS	VAC 231-939 SB 232-939	or VAC 231-940 or SB 236-001	with SB 236-004 or SB 232-01			or 58
Volatile organic compounds (VOCs) (sorbent tube)	Indoor	EPA IP-1B	1689	1 L/min	1 hr	TD, GC £	ST refer to method					
Volatile organic compounds (VOCs) (thermal desorption tube)	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47			
VOST (volatile organic sampling train)	Stack Gas, Incinerators, stationary sources	EPA 0031		1 L/min	20 min	TD, GC-MS	ST 226-134Δ 44	ST 226-133 44				
m-Xylene	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47			
m-Xylene	Ambient	EPA TO-17	1689	12.5 ml/min	8-24 hrs	TD, GC £	PS 690-102	or PS 690-101 71				
m-Xylene	Ambient	Internal		12.5 ml/min	7-30 days	SE, GC	PS 690-105	or PS 575-001 65				
o-Xylene	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47			
o-Xylene	Ambient	EPA TO-17	1689	11.9 ml/min	8-24 hrs	TD, GC £	PS 690-102	or PS 690-101 71				
o-Xylene	Ambient	Internal		11.9 ml/min	7-30 days	SE, GC	PS 690-105	or PS 575-001 65				
p-Xylene	Ambient	EPA TO-17	1689	16.7 ml/min & 66.7 ml/min	1 L & 4 L	TD, GC £	ST 226-300 Series 41	TH 224-26-02 47	CPC 224-26CPC-10 47			
p-Xylene	Ambient	EPA TO-17	1689	12.8 ml/min	8-24 hrs	TD, GC £	PS 690-102	or PS 690-101 71				
p-Xylene	Ambient	Internal		12.8 ml/min	7-30 days	SE, GC	PS 690-105	or PS 575-001 65				

† Outdoor sampling rates are shown. For indoor (low air velocity) sampling rates at < 5 cm/sec, go to www.skinc.com/instructions/1811.pdf.
‡ Use two impingers.

Δ Collect six samples at 20 minutes each. Use two Cat. No. 226-134 tubes per sample.
£ TD, GC - Samples are extracted by thermal desorption then analyzed by gas chromatography.



The World Leader in Sampling Technologies

See page 196 for abbreviations.