Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	CLG/STEL (ppm)	Vol. (liter) TWA	CLG/ STEL	Rate (ml/min) TWA	CLG/ STEL	Time TWA (hrs)	CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Abietic acid		OSHA CSI				200		2000		1.6		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Absidia species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Absidia species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Acenaphthene (polynuclear aromatic hydrocarbons by GC-MS)		ASTM D 6209				350 m^3 (max)		225 L/min		1-24		GC-MS	PUF 226-131 43 FLT 225-1821 79
Acenaphthene (polynuclear aromatic hydrocarbons by GC)		NIOSH 5515				480		2000		4		GC-FID	F/CST 225-1713 74 ST 226-30-04 35 C/HLD 225-1 87
Acenaphthene (polynuclear aromatic hydrocarbons by HPLC)		NIOSH 5506				480		2000		4		HPLC-UV	F/CST 225-1713 74 ST 226-30-04 35 C/HLD 225-1 87
Acenaphthylene (polynuclear aromatic hydrocarbons by GC-MS)		ASTM D 6209				350 m^3 (max)		225 L/min		1-24		GC-MS	PUF 226-131 43 FLT 225-1821 79
Acenaphthylene (polynuclear aromatic hydrocarbons by GC)		NIOSH 5515				480		2000		4		GC-FID	F/CST 225-1713 74 ST 226-30-04 35 C/HLD 225-1 87
Acenaphthylene (polynuclear aromatic hydrocarbons by HPLC)		NIOSH 5506				480		2000		4		HPLC-UV	F/CST 225-1713 74 ST 226-30-04 35 C/HLD 225-1 87
Acetaldehyde	●	ASTM D 5197				varies		500-1200		5 min-24 hrs		HPLC-UV	ST 226-120 ○ or ST 226-119 37
Acetaldehyde	●	NIOSH 2538		LFC		10		20		8		GC-FID	ST 226-27 35
Acetaldehyde	●	NIOSH 3507		LFC		60		125		8		HPLC	IMP 225-36-2 59 IT 225-22 59
Acetaldehyde	●	OSHA 68	1007	200		3	0.75	50	50	1	15	GC-NPD	ST 226-27 35
Acetaldehyde (aldehydes, screening)	●	NIOSH 2539		LFC		5		10		8		GC-FID & GC-MS	ST 226-118 37
Acetamide		OSHA PV2084				10		20(50)		8(3.3)		GC-NPD	ST 226-10 35
Acetates (screening)		NIOSH 2549				5		20		4		GC-MS	ST 226-330 39
Acetic acid	●	NIOSH 1603		10	15	24		50		8		GC-FID	ST 226-01 35
Acetic acid	●	OSHA ID 186SG		10		48		200		4		IC or GC-FID	ST 226-01 35
Acetic acid	●	OSHA PV2119				48		200		4		IC or GC-FID	ST 226-01 35
Acetic anhydride	●	NIOSH 3506			5	90		1000		1.5		VAS	IMP 225-36-2 59 IT 225-22 59
Acetic anhydride	●	OSHA 102	1392	5		7.5	7.5	50	500	2.5	15	GC-NPD	CF/CST 225-9010 †† 61 C/HLD 225-1 87
Acetic anhydride	●	OSHA 82	1391	5		0.75		50		15 min		GC-NPD	CF/CST 225-9009 61 C/HLD 225-1 87
Acetoin		NIOSH 2558				1-10		10-200		varies		GC-FID	ST NA SKC
Acetoin (acetyl methyl carbinol)		OSHA 1012		0.05		9	3	50	200	3	15	GC-FID	ST 226-183 38
Acetoin (acetyl methyl carbinol)		OSHA 1013		0.05		9	3	50	200	3	15	GC-FID	ST 226-183 38
Acetone	●	ASTM D 5197				varies		500-1200		5 min-24 hrs		HPLC-UV	ST 226-120 ○ or ST 226-119 37
Acetone		OSHA 69		1000		3		50		1		GC-FID	ST NA SKC
Acetone (ketones I)	●	NIOSH 1300		250		2	0.75	20	50	100 min	15	GC-FID	ST 226-01 35
Acetone (ketones I)		NIOSH 2555				0.5-3		10-200		varies		GC-FID	ST NA SKC
Acetonitrile	●	NIOSH 1606		20		10		20(50)		8(3.3)		GC-FID	ST 226-09 35
Acetophenone		OSHA PV2003				12		100		2		GC-FID	ST 226-35 35
Acetyl methyl carbinol (acetoin)		NIOSH 2558				1-10		10-200		varies		GC-FID	ST NA SKC
2-Acetylaminofluorene		OSHA CSI				240		1000		4		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Acetylene		OSHA CSI										DET TB	DT 810-171
Acetylene tetrabromide		OSHA CSI		1		96		200		8		GC-FID	ST 226-10 35
Acetylene tetrabromide (1,1,2,2-tetrabromoethane)		NIOSH 2003				96		200		8		GC-FID	ST 226-10 35
Acetylsalicylic acid		OSHA CSI				120		1000		2		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Acid black 128		OSHA CSI				200		1000		3.3		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Acid blue 9		OSHA CSI				100		1000		100 min		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Acid orange 74		OSHA CSI				200		1000		3.3		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Acid red 114		OSHA CSI				120		1000		2		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Acid yellow 34		OSHA CSI				100		1000		100 min		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Acid yellow 42		OSHA CSI				100		1000		100 min		HPLC-FD	F/CST 225-706 79 C/HLD 225-1 87
Acid/base (skin)												CI	PCH 769-3006 or W 769-1036 or TK 769-1006 122
Acid/base (surface)												CI	W 769-1024 or TK 769-1006 122
Acids, inorganic *(see specific compounds)*		NIOSH 7903	1016			48		200		4		IC	ST 226-10-03 35
Acremonium species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Acremonium species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Acridine		OSHA 58	1077	0.2 mg/m^3		960		2000		8		GR & HPLC-FD, or GR & HPLC-UV	FLT 225-7 79 CST 225-2LF 86 C/HLD 225-1 87
Acrolein		NIOSH 2501		0.1	0.3	24	3	50	200	8	15	GC-NPD	ST 226-118 37
Acrolein		OSHA 52		0.1		48	3	100	200	8	15	GC-NPD	ST 226-117 37
Acrolein (aldehydes, screening)		NIOSH 2539		0.1	0.3	5		10		8		GC-FID & GC-MS	ST 226-118 37
Acrylamide		OSHA 21		0.3 mg/m^3		120		1000		2		GC-NPD	ST 226-10 35 FLT 225-16 79 CST 225-32 87
Acrylic acid		NON 10				48		100		8		GC	ST 226-70A 36
Acrylic acid		OSHA 28				24		100		4		HPLC-UV	ST 226-30-08 35
Acrylonitrile	●	NIOSH 1604	1266	1	10 (15 min)	10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
Acrylonitrile	●	OSHA 37	1265	2	10	20	6	200	400	100 min	15	GC-NPD	ST 226-01 35
Actinomycetes, thermophilic		NIOSH 0800				varies		28,300		varies		varies	BI 225-9611 103
Adipic acid		OSHA CSI				96		200		8		GC-FID	ST 226-30-16 35
Adiponitrile		OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Aerobic bacteria (by GC-FAME)		NIOSH 0801				50-300		28,300		varies		GC-FID	BI 225-9611 103
Alcohols (screening)		NIOSH 2549				5		20		4		GC-MS	ST 226-330 39
Alcohols combined		NIOSH 1405		varies	varies	varies	varies	10-200	10-200	varies	varies	GC-FID	ST 226-01 35
Alcohols I *(see specific compounds)*		NIOSH 1400		varies		varies		varies		varies		GC-FID	ST 226-01 35
Alcohols II *(see specific compounds)*		NIOSH 1401		varies		varies		varies		8		GC-FID	ST 226-01 35

Agency standards for OSHA listings represent the OSHA PELs reported in the 29 CFR 1910.1000 Part 1910, Section 1000.

References and abbreviations are found on pages 196-197.

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Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Alcohols III *(see specific compounds)*		NIOSH 1402		varies		varies		varies		8		GC-FID	ST 226-01 35
Alcohols IV *(see specific alcohol)*		NIOSH 1403		varies		varies		varies		varies		GC-FID	ST 226-01 35
Aldehydes (screening)	●	NIOSH 2539		varies		5		20		4		GC-FID & GC-MS	ST 226-118 37
Aldehydes (screening)	●	NIOSH 2549				5		20		4		GC-MS	ST 226-330 39
Aldehydes *(see Environmental Sampling Guide)*		EPA TO-5											
Aldicarb (organonitrogen pesticides)		NIOSH 5601				240		1000		4		HPLC-UV	ST 226-58 or ST 226-30-16 35
Aldicarb (Temik)		OSHA 74	1399			480		1000		8		GC-NPD	ST 226-30-16 35
Aldrin		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
Aldrin		NIOSH 5502		0.25 mg/m³		240		500		8		GC-ECN	F/CST 225-709 79 IMP 225-36-2 59 IT 225-22 59 C/HLD 225-1 87
Aldrin		OSHA CSI		0.25 mg/m³		240		1000		4		GC-ECN	F/CST 225-709 79 IMP 225-36-2 59 IT 225-22 59 C/HLD 225-1 87
Aliphatic hydrocarbons (screening)		NIOSH 2549				5		20		4		GC-MS	ST 226-330 39
Alkaline dusts		NIOSH 7401					30		2000		15	TITRA	FLT 225-17-01 74 CST 225-3LF 86 C/HLD 225-1 87
Allethrin		ASTM D 4861				240-7200		1000-5000		4-24		HPLC-UV	PUF 226-92 42
Allyl alcohol	●	OSHA CSI		2		10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
Allyl alcohol	●	OSHA PV2140		2 (skin)		10		50		200 min		GC-FID	ST 226-01 35
Allyl alcohol (alcohols combined)	●	NIOSH 1405		2	4 (skin)	1-10	1-10	10-200	10-200	varies	varies	GC-FID	ST 226-01 35
Allyl alcohol (alcohols III)	●	NIOSH 1402		2	4	10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
Allyl chloride	●	NIOSH 1000		1	2		15		1000		15	GC-FID	ST 226-01 35
Allyl chloride	●	OSHA 07	1126	1		10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
Allyl glycidyl ether		NIOSH 2545		5	10	6	3	50	200	2	15	GC-FID	ST 226-35-03 36
Allyl propyl disulfide		OSHA PV2086		2		10		20(50)		8(3.3)		GC-FPD	ST 226-110 37
Allyll amine	●											HPLC-UV	PS 500-400 66
Alternaria species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Alternaria species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Alumina (aluminum & compounds [total dust as Al])		NIOSH 7013		10 mg/m³		360		1000		6		AA-F	F/CST 225-3-01 77 C/HLD 225-1 87
Alumina (particulates, respirable)		NIOSH 0600	1038			375		2500		2.5		GR	CYC 225-01-02 95 C/HLD 225-1 87 FLT 225-8-01 73 CST 225-3LF 86
Alumina (particulates, total)		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
alpha-Alumina (respirable fraction)		OSHA CSI		5 mg/m³		varies		varies		varies		GR	CYC 225-105 94 FLT 225-8-01 73 CST 225-3LF 86 C/HLD 225-1 87
alpha-Alumina (total dust)		OSHA CSI		15 mg/m³		960		2000		8		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Aluminum (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥		10 mg/m³ (total dust)		5-100		1000-4000		varies		ICP-AES	F/CST 225-3-01 or F/CST 225-803 73 C/HLD 225-1 87
Aluminum (elements by ICP HNO_3 digestion)		NIOSH 7303		10 mg/m³ (total dust) 5 mg/m³ (respirable fume)		2-10,000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Aluminum (elements by ICP HNO_3/$HClO_4$ ashing)		NIOSH 7300	1455	10 mg/m³ (total dust) 5 mg/m³ (respirable fume)		5-100		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Aluminum (respirable fraction)		OSHA CSI		5 mg/m³		varies		varies		varies		GR	FLT 225-8-01 73 CYC 225-105 94 CST 225-3LF 86 C/HLD 225-1 87
Aluminum (total dust)		OSHA CSI		15 mg/m³		960		2000		8		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Aluminum & compounds (total dust as Al)		NIOSH 7013		10 mg/m³		360		1000		6		AA-F	F/CST 225-3-01 77 C/HLD 225-1 87
Aluminum soluble salts		OSHA ID 121				960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Aluminum welding fumes		OSHA CSI				960		2000		8		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Aluminum, pyro powders		OSHA CSI				960		2000		8		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Alupent		OSHA CSI				720		2000		6		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Amiben		OSHA CSI				240		1000		4		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Amines		NIOSH 2002		varies		20		40		8		GC-FID or GC-NSD	ST 226-10 35
Amines, aliphatic		NIOSH 2010		varies		24		50		8		GC-FID	ST 226-10 35
Amines, aliphatic (skin)												CI	PCH 769-3005 or W 769-1035 or TK 769-1005 122
Amines, aliphatic (surface)												CI	W 769-1025 or TK 769-1005 122
Amines, aromatic (skin)												CI	PCH 769-3001 or W 769-1031 or TK 769-1001 122
Amines, aromatic (surface)												CI	W 769-1021 or TK 769-1001 122
2-Amino-2-methy-1-propanol		OSHA CSI				9		100		90 min		GC-NPD	ST 226-10 35
2-Amino-2-methy-1-propanol		OSHA PV2145				10		100		100 min		HPLC-UV	ST 226-30-16 35
4-Aminobiphenyl		OSHA 93	1233			100		1000		100 min		GC-ECD	CF/CST 225-9004 61 C/HLD 225-1 87
2-Aminoethanol		NIOSH 2007		3	6	10		20		8		GC-FID	ST 226-10-04 35
2-Aminoethanol		NIOSH 3509		3	6	240		1000		4		IC	IMP 225-36-1 59 IT 225-22 59
2-Aminoethanol		OSHA PV2111		3		10	1.5	100	100	100 min	15	HPLC-UV	ST 226-30-18 35
Aminoethanol compounds I *(see specific compounds)*		NIOSH 2007		varies		varies		varies		8		GC-FID	ST 226-10-04 35
Aminoethanol compounds II *(see specific compounds)*		NIOSH 3509		varies		240		1000		4		IC	IMP 225-36-1 59 IT 225-22 59
Aminoethylethanolamine		OSHA PV2116				10		100				HPLC-UV	ST 226-30-18 35
N-Aminoethylpiperazine		OSHA CSI				9		100		90 min		GC-NPD	ST 226-98 37
p-Aminophenylarsonic acid (arsenic, organo-)		NIOSH 5022				960		2000		8		IC-AA	FLT 225-17-01 74 CST 225-3LF 86 C/HLD 225-1 87

Agency standards for OSHA listings represent the OSHA PELs reported in the 29 CFR 1910.1000 Part 1910, Section 1000.

References and abbreviations are found on pages 196-197.

Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
2-Aminopyridine		OSHA CSI		0.5		12		200		1		GC-FID	ST 226-35-02 35
2-Aminopyridine		OSHA PV2143		0.5		240		1000		4		GC-NPD	CF/CST 225-9004 61 C/HLD 225-1 87
3-Aminopyridine		OSHA PV2143				240		1000		4		GC-NPD	CF/CST 225-9004 61 C/HLD 225-1 87
4-Aminopyridine		OSHA PV2143				240		1000		4		GC-NPD	CF/CST 225-9004 61 C/HLD 225-1 87
Amitrole		OSHA PV2006				60		1000		1		HPLC-UV	IMP 225-36-1 59 IT 225-22 59
Ammonia	●	NIOSH 6015		25	35	72	3	150	200	8	15	VAS	ST 226-10-06 35 F/CST 225-3-01** 77
Ammonia	●	NON 41				18	5	75	500	4	10	CLR	ST 226-61 36
Ammonia	●	OSHA ID 188	1008	50		24	7.5	100	500	4	15	IC-ECN	ST 226-29 35
Ammonia (by IC)		NIOSH 6016		25	35	48	3	100	200	8	15	IC	ST 226-10-06 35 F/CST 225-3-01** 77
Ammonium chloride (fume)		OSHA ID 188				960	30	2000	2000	8	15	IC-ECN	F/CST 225-3-01 77 C/HLD 225-1 87
Ammonium hydroxide *(see ammonia)*													
Ammonium metavanadate *(see vanadium oxides)*		NIOSH 7504											
Ammonium nitrate		OSHA CSI				960		2000		8		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Ammonium sulfamate (respirable dust)		OSHA CSI		5 mg/m³		varies		varies		varies		GR	CYC 225-105 94 C/HLD 225-1 87 FLT 225-8-01 73 CST 225-3LF 86
Ammonium sulfamate (total dust)		OSHA CSI		15 mg/m³		960		2000		8		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Ammonium sulfamate (total dust)		OSHA ID 188		15 mg/m³		960		2000		8		GR & IC-ECN	F/CST 225-3-01 77 C/HLD 225-1 87
n-Amyl acetate	●	OSHA 07		100		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
sec-Amyl acetate (2-pentyl acetate)	●	OSHA 07		125		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
n-Amyl acetate (esters I)	●	NIOSH 1450		100		1-10		10-200		varies		GC-FID	ST 226-01 35
n-Amyl alcohol	●											GC-FID	PS 575-002 64
t-Amyl methyl ether (methyl tert-amyl ether)	●											GC-FID	PS 575-001 64
Amyl nitrite		OSHA CSI				8		50		2.5		HPLC-UV	ST 226-01 35
Aniline	●	NIOSH 2017		LFC		24		200		2		GC-FID	CF/CST 225-9004 61 ST 226-15 35
Aniline	●	OSHA PV2079		5		24		50		8		GC-FID	ST 226-98 37
Aniline (amines, aromatic)	●	NIOSH 2002	1058	LFC		24		50		8		GC-FID or GC-NSD	ST 226-10 35
o-Anisaldehyde		OSHA CSI				96		200		8		HPLC-UV	ST 226-30 35
Anisidine		NIOSH 2514		0.5 mg/m³		240		1000		4		HPLC-UV	ST 226-30-05 35
Anisidine (o- & p-isomers)		OSHA CSI		0.5 mg/m³		240		1000		4		HPLC-UV	ST 226-30-05 35
Anthophyllite fibers *(see asbestos fibers)*		NIOSH 7400											
Anthracene		OSHA 58	1075	0.2 mg/m³		960		2000		8		GR & HPLC-FD, or GR & HPLC-UV	FLT 225-7 79 C/HLD 225-1 87 CST 225-2LF 86
Anthracene (polynuclear aromatic hydrocarbons by GC-MS)		ASTM D 6209				350 m³ (max)		225 L/min		1-24		GC-MS	PUF 226-131 43 FLT 225-1821 79
Anthracene (polynuclear aromatic hydrocarbons by GC)		NIOSH 5515				480		2000		4		GC-FID	F/CST 225-1713 74 ST 226-30-04 35 C/HLD 225-1 87
Anthracene (polynuclear aromatic hydrocarbons by HPLC)		NIOSH 5506				480		2000		4		HPLC-UV	F/CST 225-1713 74 ST 226-30-04 35 C/HLD 225-1 87
Antimony (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥		0.5 mg/m³		50-2000		1000-4000		varies		ICP-AES	F/CST 225-3-01 or F/CST 225-803 73 C/HLD 225-1 87
Antimony (elements by ICP HNO_3 digestion)		NIOSH 7303		0.5 mg/m³		3-100,000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Antimony (elements by ICP HNO_3/$HClO_4$ ashing)		NIOSH 7300	1455	0.5 mg/m³		50-2000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Antimony (ICP analysis of metal/metalloid particulates from solder operations)		OSHA ID 206		0.5 mg/m³		480		2000		4		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Antimony & compounds (as Sb)		OSHA ID 121		0.5 mg/m³		960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Antimony & compounds (as Sb)		OSHA ID 125G		0.5 mg/m³		480		2000		4		ICP-AES	F/CST 225-3-01 or F/CST 225-3100 77 C/HLD 225-1 87
ANTU (alphanaphthyl thiourea)		OSHA CSI		0.3 mg/m³		480		2000		4		HPLC-UV	FLT 225-17-01 74 CST 225-2LF 86 C/HLD 225-1 87
Apron		OSHA PV2102				60		1000		1		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Aqua fortis (acids, inorganic)		NIOSH 7903	1016	2	4	48		200		4		IC	ST 226-10-03 35
Aroclor		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
Aroclor		NIOSH 5602				480		1000		8		GC-ECD	ST 226-58 36
Aroclor 1242		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
Aroclor 1242 (42% Cl) *(see polychlorobiphenyls)*		NIOSH 5503											
Aroclor 1254		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
Aroclor 1254 (54% Cl) *(see polychlorobiphenyls)*		NIOSH 5503											
Aroclor 1260		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
Aromatic hydrocarbons (screening)		NIOSH 2549				5		20		4		GC-MS	ST 226-330 39
Arsenic (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥		0.002 mg/m³		5-2000		1000-4000		varies		ICP-AES	F/CST 225-3-01 or F/CST 225-803 73 C/HLD 225-1 87
Arsenic (elements by ICP HNO_3 digestion)		NIOSH 7303		0.002 mg/m³		8-5,000,000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Arsenic (elements by ICP HNO_3/$HClO_4$ ashing)		NIOSH 7300	1040	0.002 mg/m³ (C)		5-2000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Arsenic (elements on wipes)		NIOSH 9102				wipe						ICP-AES	W 225-2414 124 TMP 225-2403 or TMP 225-2415 124
Arsenic (inorganic compounds as As)		OSHA ID 105		0.01 mg/m³		960		2000		8		AAS-HGA	F/CST 225-3-01 77 C/HLD 225-1 87
Arsenic & compounds (as As)		NIOSH 7900		2 µg/m³ (15 min)		30		2000		15		AA-F	F/CST 225-3-01 77 C/HLD 225-1 87
Arsenic trioxide as AS		NIOSH 7901		2 mg/m³ (15 min)		30		2000		15		AAS-GF	FLT 225-5 ‡ 76 CST 225-2LF 86 C/HLD 225-1 87
Arsenic, inorganic (volatile compounds as As)		OSHA ID 105		0.01 mg/m³		960		2000		8		AAS-HGA	CF/CST 225-9001 61 C/HLD 225-1 87
Arsenic, organo-		NIOSH 5022				960		2000		8		IC-AA	FLT 225-17-01 74 CST 225-2LF 86 C/HLD 225-1 87
Arsine		NIOSH 6001	1278	2 µg/m³ (15 min)		10	3	20	200	8	15	AAS-GF	ST 226-01 35
Arylam *(see carbaryl)*													

Agency standards for OSHA listings represent the OSHA PELs reported in the 29 CFR 1910.1000 Part 1910, Section 1000.

References and abbreviations are found on pages 196-197.

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Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Asbestos		OSHA ID 160	1301	0.1 f/cc	1 f/cc EL	25-1200	25-1200	500-2500	500-2500	varies	varies	PCM	FLT/CL 225-321 or FLT/CL 225-326 or FLT/CL 225-321A or FLT/CL 225-327 77
Asbestos ([bulk] by PLM)		NIOSH 9002		1% (bulk)		bulk						PLM	
Asbestos (by TEM)		NIOSH 7402		0.1 f/cc/400L		960		2000		8		TEM	FLT/CL 225-327 77
Asbestos (chrysotile)		NIOSH 9000				bulk						XRD	
Asbestos (mass concentrations)		ASTM D 5756	1440			varies		2000		2 min (minimum)		TEM	MVC 225-322 125
Asbestos (structure number concentrations)		ASTM D 5755	1440			varies		2000		2 min (minimum)		TEM	MVC 225-322 125
Asbestos fibers		NIOSH 7400	1033	0.1 f/cc/400L		varies		varies		varies		PCM	FLT/CL 225-321 or FLT/CL 225-326 or FLT/CL 225-321A or FLT/CL 225-327 77
Aspartame		NIOSH 5031				480		1000		8		HPLC-UV	FLT 225-17-01 74 CST 225-2LF 86 C/HLD 225-1 87
Aspergillus flavipes species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Aspergillus flavipes species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Aspergillus flavus species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Aspergillus flavus species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Aspergillus fumigatus species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Aspergillus fumigatus species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Aspergillus glaucus species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Aspergillus glaucus species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Aspergillus nidulans species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Aspergillus nidulans species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Aspergillus niger species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Aspergillus niger species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Aspergillus ochraceus (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Aspergillus ochraceus (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Aspergillus versicolor (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Aspergillus versicolor (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Asphalt fume (benzene-soluble & total particulate)		NIOSH 5042			5 mg/m³ (15 min) (C)	360	60	1000	4000	6	15	GR	FLT 225-27-07 74 SP 225-27 87 CST 225-2LF 86
Asphalt fume particulate		ASTM D 6494				960		2000		8		GR	F/CST 225-1713 74 C/HLD 225-1 87
Asphalt fumes (petroleum)		OSHA 58	1078			960		2000		8		GR & HPLC-FD, or GR & HPLC-UV	FLT 225-7 79 CST 225-2LF 86 C/HLD 225-1 87
Atrazine		ASTM D 4861				240-7200		1000-5000		4-24		GC-NPD	PUF 226-92 42
Atrazine		NIOSH 5602		5		480		1000		8		GC-ECD	ST 226-58 36
Atrazine		OSHA CSI				240		1000		4		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Auramine		OSHA CSI				100		1000		100 min		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Aureobasidium pullulans (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Aureobasidium pullulans (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Aureobasidium species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Aureobasidium species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Azelaic acid		NIOSH 5019				960		2000		8		GC-FID	F/CST 225-803 73 C/HLD 225-1 87
Azinphos-ethyl		OSHA CSI				480		1000		8		GC-FPD	ST 226-30-16 35
Azinphos-methyl		OSHA PV2087		0.2 mg/m³		480		1000		8		GC-FPD	ST 226-30-16 35
Azinphos-methyl (organophosphorus pesticides)		NIOSH 5600		0.2 mg/m³		240		1000		4		GC-FPD	ST 226-58 36
1,1'-Azobisformamide		OSHA CSI				90		1000		1.5		HPLC-UV	ST 226-30-16 35
Bacteria		NIOSH 0800				varies		28,300		varies		varies	BI 225-9611 103
Bacteria (by GC-FAME)		NIOSH 0801				50-300		28,300		varies		GC-FID	BI 225-9611 103
Bacteria (in air)		NON 48				62.5-375		12500 +		5-30		varies	BS 225-9595 105 VT ◊ 225-9598A 105
Barium (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥		0.5 mg/m³		50-2000		1000-4000		varies		ICP-AES	F/CST 225-3-01 or F/CST 225-803 73 C/HLD 225-1 87
Barium (elements by ICP HNO_3 digestion)		NIOSH 7303				1-100,000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Barium (elements on wipes)		NIOSH 9102				wipe						ICP-AES	W 225-2414 124 TMP 225-2403 or TMP 225-2415 124
Barium (insoluble compounds)		OSHA ID 121				960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Barium (soluble compounds)		NIOSH 7056		0.5 mg/m³		960		2000		8		AA	F/CST 225-3-01 77 C/HLD 225-1 87
Barium (soluble compounds)		OSHA ID 121		0.5 mg/m³		960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Barium chloride (barium, soluble compounds)		NIOSH 7056		0.5 mg/m³		960		2000		8		AA	F/CST 225-3-01 77 C/HLD 225-1 87
Barium sulfate (respirable fraction)		OSHA ID 204	1216	5 mg/m³		varies		varies		varies		GR & XRF	CYC 225-105 94 C/HLD 225-1 87 F/CST 225-3-01 77
Barium sulfate (total dust)		OSHA ID 121	1217	15 mg/m³		960		2000		8		AA or AES	F/CST 225-802 73 C/HLD 225-1 87
Baygon (propoxur)		ASTM D 4861				240-7200		1000-5000		4-24		HPLC-UV	PUF 226-92 42
Baygon (propoxur)		OSHA PV2007				48		100		8		HPLC-UV	ST 226-30-16 35
Bendiocarb		ASTM D 4861				240-7200		1000-5000		4-24		HPLC-UV	PUF 226-92 42
Bendiocarb (Ficam)		OSHA PV2008				240		1000		4		HPLC-UV	ST 226-30-16 35
Benomyl (organonitrogen pesticides)		NIOSH 5601				240		1000		4		HPLC-UV	ST 226-58 or ST 226-30-16 35
Benomyl (respirable dust)		OSHA CSI		5 mg/m³		varies		varies		varies		HPLC-UV	ST 226-30-16 35 CYC 225-105 94
Benomyl (total dust)		OSHA PV2107		15 mg/m³		60		1000		1		HPLC-UV	ST 226-30-16 35
Bentonite *(see dust, total & respirable nuisance)*													
Benz(a)anthracene		OSHA CSI				960		2000		8		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Benz(a)anthracene (polynuclear aromatic hydrocarbons by GC-MS)		ASTM D 6209				350 m³ (max)		225 L/min		1-24		GC-MS	PUF 226-131 43 FLT 225-1821 79
Benz(a)anthracene (polynuclear aromatic hydrocarbons by GC)		NIOSH 5515				480		2000		4		GC-FID	F/CST 225-1713 74 ST 226-30-04 35 C/HLD 225-1 87
Benz(a)anthracene (polynuclear aromatic hydrocarbons by HPLC)		NIOSH 5506				480		2000		4		HPLC-FD	F/CST 225-1713 74 ST 226-30-04 35 C/HLD 225-1 87
Benzaldehyde	●	ASTM D 5197				varies		500-1200		5 min-24 hrs		HPLC-UV	ST 226-120 ❍ or ST 226-119 37

Agency standards for OSHA listings represent the OSHA PELs reported in the 29 CFR 1910.1000 Part 1910, Section 1000.

References and abbreviations are found on pages 196-197.

				SAMPLING ∞																
				Agency Standard		Vol. (liter)		Rate (ml/min)		Time										
Chemical Hazard	Passive Guide	Agency Reference	Chem F File	TWA (ppm)	CLG/STEL (ppm)	TWA	CLG/ STEL	TWA	CLG/ STEL	TWA (hrs)	CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number							
Benzaldehyde	●							14.1		8	15	HPLC-UV	PS	500-100	67					
Benzene	●	ASTM D 5466				6		varies		varies		GC-MS	CAN	228 Series		PK	228 Series			
Benzene	●	OSHA 1005	1749	1	5	12	0.75	50	50	4	15	GC-FID	ST	226-01	35					
Benzene		OSHA 1005	1749	1	5					8	15	GC-FID	PS	575-002	64					
Benzene	●	OSHA 12	1009	1	5	10	3	200	200	50 min	15	GC-FID	ST	226-01	35					
Benzene (by portable GC)		NIOSH 3700	1029	0.1	1 (15 min)	varies		20-5000		varies		P GC-PID	SB	232 Series	50					
Benzene (hydrocarbons, aromatic)	●	NIOSH 1501		0.1	1	5-30	5-30	10-200	10-200	varies	varies	GC-FID	ST	226-01	35					
alpha-Benzene hexachloride		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF	226-92	42					
beta-Benzene hexachloride		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF	226-92	42					
gamma-Benzene hexachloride		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF	226-92	42					
Benzene-soluble & total particulate (asphalt fume)		NIOSH 5042			5 mg/m³ (15 min) (C)	360	60	1000	4000	6	15	GR	FLT CST	225-27-07 225-2LF	74 86	SP	225-27	87		
Benzene-soluble particulate matter		ASTM D 4600	1416			960		2000		8		GR	FLT CST	225-7 225-2LF	79 86	SP C/HLD	225-27 225-1	87 87		
1,2-Benzenedicarboxylic acid		OSHA CSI				240		1000		4		GC-FID	ST	226-56	36					
Benzidine		NIOSH 5509		LFC		96		200		8		HPLC-UV	FLT	225-16	79	CST	225-32	87		
Benzidine		OSHA 65	1239			100		1000		100 min		GC-ECD	CF/CST	225-9004	61	C/HLD	225-1	87		
Benzidine dyes (dyes, benzidine)		NIOSH 5013		LFC		480		1000		8		HPLC	FLT C/HLD	225-17A 225-1	74 87	CST	225-3LF	86		
Benzidine-based dyes		OSHA CSI				480		1000		8		HPLC-UV	FLT C/HLD	225-17-04 225-1	74 87	CST	225-3LF	86		
Benzo(a)pyrene (polynuclear aromatic hydrocarbons by GC-MS)		ASTM D 6209				350 m³ (max)		225 L/min		1-24		GC-MS	PUF PEM	226-131 761-200B	43 98	FLT FLT	225-1821 225-1709	79 74		
Benzo(a)pyrene (polynuclear aromatic hydrocarbons by GC)		NIOSH 5515		0.1 mg/m³		480		2000		4		GC-FID	F/CST C/HLD	225-1713 225-1	74 87	ST	226-30-04	35		
Benzo(a)pyrene (polynuclear aromatic hydrocarbons by HPLC)		NIOSH 5506				480		2000		4		HPLC-FD	F/CST C/HLD	225-1713 225-1	74 87	ST	226-30-04	35		
Benzo(b)fluoranthene (polynuclear aromatic hydrocarbons by GC-MS)		ASTM D 6209				350 m³ (max)		225 L/min		1-24		GC-MS	PUF PEM	226-131 761-203B	43 98	FLT FLT	225-1821 225-1709	79 74		
Benzo(b)fluoranthene (polynuclear aromatic hydrocarbons by GC)		NIOSH 5515				480		2000		4		GC-FID	F/CST C/HLD	225-1713 225-1	74 87	ST	226-30-04	35		
Benzo(b)fluoranthene (polynuclear aromatic hydrocarbons by HPLC)		NIOSH 5506				480		2000		4		HPLC-FD	F/CST C/HLD	225-1713 225-1	74 87	ST	226-30-04	35		
Benzo(e)pyrene		OSHA CSI				960		2000		8		HPLC-UV	F/CST	225-706	79	C/HLD	225-1	87		
Benzo(e)pyrene (polynuclear aromatic hydrocarbons by GC-MS)		ASTM D 6209				350 m³ (max)		225 L/min		1-24		GC-MS	PUF	226-131	43	FLT	225-1821	79		
Benzo(e)pyrene (polynuclear aromatic hydrocarbons by GC)		NIOSH 5515				480		2000		4		GC-FID	F/CST C/HLD	225-1713 225-1	74 87	ST	226-30-04	35		
Benzo(e)pyrene (polynuclear aromatic hydrocarbons by HPLC)		NIOSH 5506				480		2000		4		HPLC-FD	F/CST C/HLD	225-1713 225-1	74 87	ST	226-30-04	35		
Benzo(g,h,i)perylene (polynuclear aromatic hydrocarbons by GC-MS)		ASTM D 6209				350 m³ (max)		225 L/min		1-24		GC-MS	PUF	226-131	43	FLT	225-1821	79		
Benzo(g,h,i)perylene (polynuclear aromatic hydrocarbons by GC)		NIOSH 5515				480		2000		4		GC-FID	F/CST C/HLD	225-1713 225-1	74 87	ST	226-30-04	35		
Benzo(g,h,i)perylene (polynuclear aromatic hydrocarbons by HPLC)		NIOSH 5506				480		2000		4		HPLC-FD	F/CST C/HLD	225-1713 225-1	74 87	ST	226-30-04	35		
Benzo(k)fluoranthene (polynuclear aromatic hydrocarbons by GC)		NIOSH 5515				480		2000		4		GC-FID	F/CST C/HLD	225-1713 225-1	74 87	ST	226-30-04	35		
Benzo(k)fluoranthene (polynuclear aromatic hydrocarbons by HPLC)		NIOSH 5506				480		2000		4		HPLC-FD	F/CST C/HLD	225-1713 225-1	74 87	ST	226-30-04	35		
Benzoalphapyrene		OSHA 58		0.2 mg/m³		960		2000		8		GR & HPLC-FD, or GR & HPLC-UV	FLT C/HLD	225-7 225-1	79 87	CST	225-2LF	86		
2,3-Benzofuran		OSHA CSI				96		200		8		HPLC-UV	ST	226-30	35					
Benzoic acid		OSHA CSI				24		100		4		GC-FID	ST	226-115	37					
Benzophenone		NON 39				480		1000		8		GC-FID	ST	226-56	36					
Benzophenone		OSHA PV2130		0.5 mg/m³		48		200		4		GC-FID	ST	226-110	37					
Benzophenonetetracarboxylic acid dianhydride		OSHA CSI				100		1000		100 min		HPLC	FLT C/HLD	225-17-04 225-1	74 87	CST	225-2LF	86		
Benzothiazole in asphalt fume		NIOSH 2550				480		1000		8		GC-SCD	F/CST C/HLD	225-1713 225-1	74 87	ST	226-30-04	35		
2-Benzothiazolethiol		OSHA CSI				240		2000		2		HPLC-UV	F/CST	225-706	79	C/HLD	225-1	87		
Benzotrichloride	●	OSHA ID 216SG				12		200		1		GC-FID	ST	226-35-03	36					
Benzotrifluoride (trifluoromethyl benzene, OXSOL 2000)	●				100							GC-FID	PS	575-001	or	PS	575-002	64		
Benzoyl chloride		OSHA CSI				90		1000		1.5		GC-ECD	IMP	225-36-1	59	IT	225-22	59		
Benzoyl peroxide		NIOSH 5009		5 mg/m³		90		1500		1		HPLC-UV	F/CST	225-3-01	77	C/HLD	225-1	87		
Benzyl acetate	●	OSHA PV2124				10		100		100 min		GC-FID	ST	226-73	36					
Benzyl alcohol		OSHA PV2009				24		100		4		GC-FID	ST	226-95	37					
Benzyl bromide		OSHA CSI										DET TB	DT	810-136L						
Benzyl chloride	●	ASTM D 5466				6		varies		varies		GC-MS	CAN	228 Series		PK	228 Series			
Benzyl chloride	●	OSHA 07	1187	1		10		20(50)		8(3.3)		GC-FID	ST	226-01	35					
Benzyl chloride (hydrocarbons, halogenated)	●	NIOSH 1003		1		10		10-200		varies		GC-FID	ST	226-01	35					
Beryllium (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥		0.0005 mg/m³		1250-2000		1000-4000		varies		ICP-AES	F/CST C/HLD	225-3-01 225-1	or 87	F/CST	225-803	73		
Beryllium (elements by ICP HNO_3 digestion)		NIOSH 7303				35-25,000,000		1000-4000		varies		ICP-AES	F/CST	225-3-01	77	C/HLD	225-1	87		
Beryllium (elements by ICP HNO_3/$HClO_4$ ashing)		NIOSH 7300	1455	0.0005 mg/m³		1250-2000		1000-4000		varies		ICP-AES	F/CST	225-3-01	77	C/HLD	225-1	87		
Beryllium (elements on wipes)		NIOSH 9102				wipe						ICP-AES	W TMP	225-2414 225-2415	124 124	TMP	225-2403	or		

Agency standards for OSHA listings represent the OSHA PELs reported in the 29 CFR 1910.1000 Part 1910, Section 1000.

References and abbreviations are found on pages 196-197.

Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Beryllium (ICP analysis of metal/metalloid particulates from solder operations)		OSHA ID 206		2 mg/m³	5 mg/m³ (C)	480	10	2000	2000	4	5	ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Beryllium (in air by portable fluorometry)		NIOSH 7704		2 mg/m³	5 mg/m³ (C)	240-2000		1000-4000				P FLUOR UV/VIS	F/CST 225-3-01 or C/HLD 225-1 87 F/CST 225-3100 77
Beryllium & compounds		OSHA ID 125G		2 µg/m³	5 µg/m³	480	60	2000	2000	4	15	ICP-AES	F/CST 225-3-01 or C/HLD 225-1 87 F/CST 225-3100 77
Beryllium & compounds (as Be)		NIOSH 7102			0. 5 µg/m³	960		2000		8		AA-GF	F/CST 225-3-01 77 C/HLD 225-1 87
Betasan		OSHA CSI				480		1000		8		GC-FPD	ST 226-30-16 35
BHC (alpha-, beta-, gamma-)		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
Bioaerosol sampling		NIOSH 0800				varies		28,300		varies		varies	BI 225-9611 103
Bioaerosols						15-150		15000		1-10 min		varies	STC 225-9820 81
Bioaerosols		NON 48				62.5-375		12500 +		5-30		varies	BS 225-9595 105 VT ◊ 225-9598A 105
Biphenyl (diphenyl)		NIOSH 2530		0.2		10		20(50)		8(3.3)		GC-FID	ST 226-35-01 35
Bipolaris species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Bipolaris species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
4,4'-Bipyridine (vapor & aerosol)		NON 26				96	2	200	200	8	10	HPLC	ST 226-30-05 35 C/HLD 225-1 87 F/CST 225-706 79
Bis (tributyltin) oxide (tin, organic compounds [as Sn])		OSHA CSI				960		2000		8		AA-GF	F/CST 225-709 79 C/HLD 225-1 87
Bismuth		OSHA CSI				960		2000		8		AA	F/CST 225-3-01 77 C/HLD 225-1 87
Bismuth (elements by ICP HNO3 digestion)		NIOSH 7303				1-10,000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Bismuth telluride, Se-doped		OSHA ID 121		5 mg/m³		960		2000		8		AA or AES	FLT 225-8-01 73 CST 225-2LF 86 C/HLD 225-1 87
Bismuth telluride, undoped (respirable dust)		OSHA ID 121		5 mg/m³		varies		varies		varies		GR & AA or GR & AES	CYC 225-105 94 FLT 225-8-01 73 C/HLD 225-1 87 CST 225-3LF 86
Bismuth telluride, undoped (total dust)		OSHA CSI		15 mg/m³		960		2000		8		GR	FLT 225-8-01 73 CST 225-2LF 86 C/HLD 225-1 87
Bisphenol A		OSHA CSI				360		1500		4		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Bladex		OSHA CSI				100		1000		100 min		HPLC-UV	IMP 225-36-1 59 IT 225-22 59
Borates tetrasodium salts (anhydrous, decahydrate & pentahydrate)		OSHA ID 125G				480		2000		4		ICP-AES	F/CST 225-3-01 or C/HLD 225-1 87 F/CST 225-3100 77
Boric acid (total dust)		OSHA CSI				960		2000		8		GR	FLT 225-8-01 73 CST 225-2LF 86 C/HLD 225-1 87
Boron (elements by ICP HNO_3 digestion)		NIOSH 7303				1-3300		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Boron (total dust)		OSHA CSI				960		2000		8		GR	FLT 225-8-01 73 CST 225-2LF 86 C/HLD 225-1 87
Boron carbide		NIOSH 7506				600		2500		4		XRD	F/CST 225-803 73 CYC 225-01-02 95 C/HLD 225-1 87
Boron oxide (particulates, respirable)		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 CYC 225-01-02 95 C/HLD 225-1 87 CST 225-3LF 86
Boron oxide (particulates, total)		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 CST 225-2LF 86 C/HLD 225-1 87
Boron oxide (total dust)		OSHA CSI		15 mg/m³		480		2000		4		ICP-AES	FLT 225-8-01 73 CST 225-2LF 86 C/HLD 225-1 87
Boron tribromide		OSHA CSI					5		1000		5	IC	IMP 225-36-2 59 IT 225-22 59
Boron trifluoride		OSHA CSI			1 (C)		15		1000		15	ISE	IMP 225-36-2 59 IT 225-22 59
Botran		OSHA CSI				400		1000		6.7		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Bromacil		OSHA CSI				50		1000		50 min		HPLC-UV	IMP 225-36-1 59 IT 225-22 59
Bromine		NIOSH 6011	1329	0.1	0.3	240	15	1000	1000	4	15	IC	CF/CST 225-9006 61 C/HLD 225-1 87
Bromine		OSHA ID 108		0.1		120	7.5	500	500	4	15	IC	IMP 225-36-2 59 IT 225-22 59
Bromine pentafluoride		OSHA CSI				48		200		4		IC	ST 226-10-03 35
Bromoethane (ethyl bromide)	●	NIOSH 1011				4		20(50)		3.3(1.3)		GC-FID	ST 226-01 35
Bromoform	●	OSHA 07	1127	0.5		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Bromoform (hydrocarbons, halogenated)		NIOSH 1003		0.5 (skin)		10		10-200		varies		GC-FID	ST 226-01 35
1-Bromopropane	●	NIOSH 1025				0.1-12		10-200		varies		GC-FID	ST 226-01 35
1-Bromopropane	●	OSHA PV2061				12		100		2		GC-FID	ST 226-01 35
2-Bromopropane		NIOSH 1025				0.1-12		10-200		varies		GC-FID	ST 226-01 35
2-Bromopropane		OSHA PV2062				12		100		2		GC-FID	ST 226-01 35
Bromotrifluoromethane (trifluorobromomethane)		NIOSH 1017		1000		0.3		20		15 min		GC-FID	ST 226-09 35 ST 226-01 35
Bromoxynil		NIOSH 5010				240		1000		4		HPLC-UV	F/CST 225-1713 74 C/HLD 225-1 87
Bromoxynil octanoate		NIOSH 5010				240		1000		4		HPLC-UV	F/CST 225-1713 74 C/HLD 225-1 87
Bronkosol		OSHA CSI				480		1000		8		HPLC	F/CST 225-706 79 C/HLD 225-1 87
Brucine		OSHA CSI				180		1000		3		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
BTEX (hydrocarbons, aromatic. *See benzene, toluene, ethylbenzene, & xylene*)		NIOSH 1501		varies		varies		varies		varies		GC-FID	ST 226-01 35
1,3-Butadiene	●	NIOSH 1024	1010	LFC		10		20		8		GC-FID	ST 226-37 36
1,3-Butadiene	●	OSHA 56	1011	1	5	3		50		1		GC-FID	ST 226-73 36
Butane		OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-01 35
1,3-Butanediol		OSHA CSI				60		2000		30 min		GC-FID	ST 226-57 36
1-Butanethiol (butyl mercaptan)		NIOSH 2525			0.5	1		50		15		GC-FPD	ST 226-109 37
n-Butanol (alcohols combined)	●	NIOSH 1405		50 (skin)		2-10		10-200		varies		GC-FID	ST 226-01 35
2-Butanone		OSHA 1004		200		12		50		4		GC-FID	ST NA SKC
2-Butanone (ketones I)		NIOSH 2555				1-10		10-200		varies		GC-FID	ST NA SKC
2-Butanone (methyl ethyl ketone)	●	NIOSH 2500	1012	200	300	10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-81A 36
2-Butanone (methyl ethyl ketone)	●	OSHA 1004		200				16.88		8		GC-FID	PS 575-002 64
2-Butanone (methyl ethyl ketone)	●	OSHA 16	1282	200		3	1.5	100	100	30 min	15	GC-FID	ST 226-10 35

Agency standards for OSHA listings represent the OSHA PELs reported in the 29 CFR 1910.1000 Part 1910, Section 1000.

References and abbreviations are found on pages 196-197.

Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
2-Butanone (methyl ethyl ketone)		OSHA 84		200		3	0.75	50	50	1	15	GC-FID	ST NA SKC
Butene		OSHA CSI				1		20		50 min		GC-FID	ST 226-01 35
2-Butoxyethanol (alcohols IV)	●	NIOSH 1403	1275	5 (skin)		2-10		10-50		varies		GC-FID	ST 226-01 35
2-Butoxyethanol (butyl CELLOSOLVE solvent)	●	OSHA 83		50		48		100		8		GC-FID	ST 226-01 35
2-Butoxyethanol acetate (butyl CELLOSOLVE acetate)	●	OSHA 83				48		100		8		GC-FID	ST 226-01 35
n-Butyl acetate	●	OSHA 07		150		10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
n-Butyl acetate	●	OSHA 1009	1750	150		12	0.75	50	50	4	15	GC-FID	ST 226-01 35
n-Butyl acetate	●	OSHA 1009	1750	150				13.07	13.07	8	15	GC-FID	PS 575-002 64
sec-Butyl acetate	●	OSHA 07		200		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
sec-Butyl acetate	●	OSHA 1009	1750	200		12	0.75	50	50	4	15	GC-FID	ST 226-01 35
sec-Butyl acetate	●	OSHA 1009	1750	200				12.74	12.74	8	15	GC-FID	PS 575-002 64
t-Butyl acetate	●	OSHA 07		200		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
t-Butyl acetate	●	OSHA 1009	1750	200		12	0.75	50	50	4	15	GC-FID	ST 226-01 35
t-Butyl acetate	●	OSHA 1009	1750	200				13.09	13.09	8	15	GC-FID	PS 575-002 64
n-Butyl acetate (esters I)	●	NIOSH 1450	1272	150	200	1-10	1-10	10-200	10-200	varies	varies	GC-FID	ST 226-01 35
sec-Butyl acetate (esters I)	●	NIOSH 1450		200		1-10		10-200		varies		GC-FID	ST 226-01 35
t-Butyl acetate (esters I)	●	NIOSH 1450		200		1-10		10-200		varies		GC-FID	ST 226-01 35
Butyl acrylate	●	OSHA PV2011				12		50		4		GC-FID	ST 226-73 36
n-Butyl acrylate	●	NON 54		5	15	10	3	20	200	8	15	GC-FID	ST 226-81A 36
n-Butyl alcohol	●	OSHA 07		100		10	1	20	200	8	5	GC-FID	ST 226-01 35
sec-Butyl alcohol	●	OSHA 07		150		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
t-Butyl alcohol	●	OSHA 07		100		10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
n-Butyl alcohol (alcohols combined)	●	NIOSH 1405		50 (skin)		2-10		10-200		varies		GC-FID	ST 226-01 35
sec-Butyl alcohol (alcohols combined)	●	NIOSH 1405		100	150	2-10	2-10	10-200	10-200	varies	varies	GC-FID	ST 226-01 35
t-Butyl alcohol (alcohols I)	●	NIOSH 1400		100	150	10		20(50)		8(3.3)		GC-FID	ST 226-01 35
n-Butyl alcohol (alcohols II)	●	NIOSH 1401			50	10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
sec-Butyl alcohol (alcohols II)	●	NIOSH 1401		100	150	10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
Butyl benzyl phthalate		OSHA CSI				180		1000		3		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Butyl butyrate		OSHA PV2090				10		200		50 min		GC-FID	ST 226-01 35
Butyl carbitol		OSHA PV2095				10		200		50 min		GC-FID	ST 226-01 35
Butyl carbitol acetate		OSHA PV2095				10		200		50 min		GC-FID	ST 226-01 35
Butyl CELLOSOLVE acetate *(see 2-butoxyethanol acetate)*	●	OSHA 83											
Butyl CELLOSOLVE solvent *(see 2-butoxyethanol)*	●	OSHA 83											
t-Butyl chromate (as CrO_3)		OSHA ID 215 (V2)	1439	0.005 mg/m³		960		2000			15	IC-UV	F/CST 225-802 Ω 73 C/HLD 225-1 87
t-Butyl ethyl ether (ethyl tert-butyl ether)	●											GC-FID	PS 575-001 64
n-Butyl glycidyl ether	●	NIOSH 1616			5.6 (15 min)		3		200		15	GC-FID	ST 226-01 35
n-Butyl glycidyl ether	●	OSHA 07	1125	50		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
t-Butyl glycidyl ether		OSHA CSI				10		200		50 min		GC-FID	ST 226-01 35
Butyl isocyanate		OSHA CSI				15		50		5		HPLC-UV	ST NA SKC
n-Butyl lactate		OSHA PV2080				10		200		50 min		GC-FID	ST 226-01 35
n-Butyl mercaptan		NIOSH 2525			0.5		1		50		15	GC-FPD	ST 226-109 37
Butyl mercaptan (butanethiol)		OSHA CSI		10		1.5		25		1		GC-FPD	ST 226-109 37
n-Butyl mercaptan (mercaptans)		NIOSH 2542	1330		0.5 (15 min)	48	12	100	200	8	60	GC-FPD	CF/CST 225-9007 61 C/HLD 225-1 87
t-Butyl methyl ether	●	OSHA CSI				96		200		8		GC-FID	ST 226-37 36
Butyl ziram		OSHA PV2065				180		1000		3		HPLC-UV	ST 226-30-16 35
N-t-Butyl-2-benzothiazolesulfenamide		OSHA CSI				120		1000		2		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Butylamine	●	OSHA CSI			5 (C)		5		1000		5	GC-FID	ST 226-53 36
n-Butylamine	●	NIOSH 2012			5		15		1000		15	GC-FID	ST 226-53 36
Butylated hydroxytoluene		OSHA PV2108				100		1000		100 min		GC-FID	ST 226-57 36
sec-Butylbenzene		OSHA CSI				6		100		1		GC-FID	ST 226-01 35
1,3-Butylene glycol (glycols)		NIOSH 5523	1404			60		1000		1		GC-FID	ST 226-57 36
o-sec-Butylphenol		OSHA CSI				10		100		1.6		HPLC-UV	ST 226-95 37
p-tert-Butylphenol		OSHA PV2085				20		200		100 min		GC-FID	ST 226-95 37
Butyltin trichloride		OSHA ID 217SG				240		1000		4		AA-GF	ST 226-30-16 35
p-tert-Butyltoluene	●	OSHA 07	1129	10		10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
p-tert-Butyltoluene (hydrocarbons, aromatic)	●	NIOSH 1501		10	20	1-29	1-29	10-200	10-200	varies	varies	GC-FID	ST 226-01 35
Butyraldehyde		ASTM D 5197				varies		500-1200		5 min-24 hrs		HPLC-UV	ST 226-120 O or ST 226-119 37
Butyraldehyde (aldehydes, screening)		NIOSH 2539				5		20		4		GC-FID & GC-MS	ST 226-118 37
Butyraldehyde	●							16.5		4	8	HPLC-UV	PS 500-100 67
Butyric acid		OSHA CSI				18		100		3		GC-FID	ST 226-15 35
beta-Butyrolactone		OSHA CSI				9.6		20		8		GC-FID	ST 226-01 35
gamma-Butyrolactone	●	OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Cadmium		OSHA ID 189	1456	5 µg/m³		960		2000		8		AA	F/CST 225-3-01 77 C/HLD 225-1 87
Cadmium (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥		LFC		13-2000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 or F/CST 225-803 87 73
Cadmium (elements by ICP HNO_3 digestion)		NIOSH 7303				3-500,000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Cadmium (elements by ICP HNO_3/$HClO_4$ ashing)		NIOSH 7300	1280	LFC		13-2000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Cadmium (elements on wipes)		NIOSH 9102				wipe						ICP-AES	W 225-2414 124 TMP 225-2415 124 TMP 225-2403 or
Cadmium & compounds (as Cd)		NIOSH 7048	1467	LFC		480	30	1000	2000	8	15	AA-F	F/CST 225-3-01 77 C/HLD 225-1 87
Cadmium dust (as Cd)		OSHA ID 121		0.2 mg/m³	0.5 mg/m³	960	30	2000	2000	8	15	AA	F/CST 225-3-01 77 C/HLD 225-1 87

Agency standards for OSHA listings represent the OSHA PELs reported in the 29 CFR 1910.1000 Part 1910, Section 1000.

References and abbreviations are found on pages 196-197.

C

Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Cadmium dust (as Cd)		OSHA ID 206		0.2 mg/m³	0.5 mg/m³	960	30	2000	2000	8	15	ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Cadmium fume (ICP analysis of metal/metalloid particulates from solder operations)		OSHA ID 206		0.1 mg/m³	0.3 mg/m³ (C)	480		2000		4		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Calcium (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥		varies		5-200		1000-4000		varies		ICP-AES	F/CST 225-3-01 or 87 C/HLD 225-1 F/CST 225-803 73
Calcium (elements by ICP HNO_3 digestion)		NIOSH 7303				2-10,000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Calcium (elements by ICP HNO_3/$HClO_4$ ashing)		NIOSH 7300	1455	varies		5-200		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Calcium *(see specific compounds)*		NIOSH 7020		varies		varies		varies		varies		AA-F	F/CST 225-3-01 77 C/HLD 225-1 87
Calcium & compounds (as Ca)		NIOSH 7020		varies		240		1000		4		AA-F	F/CST 225-3-01 77 C/HLD 225-1 87
Calcium arsenate (as As)		OSHA CSI				600		2000		5		AA-GF	F/CST 225-3-01 77 C/HLD 225-1 87
Calcium bromide *(see dust, total & respirable nuisance)*		OSHA CSI											
Calcium carbonate		OSHA ID 121		15 mg/m³		960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Calcium carbonate (calcium)		NIOSH 7020		2 mg/m³		240		1000		4		AA-F	F/CST 225-3-01 77 C/HLD 225-1 87
Calcium carbonate (particulates, respirable)		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-01-02 95 CST 225-3LF 86
Calcium carbonate (particulates, total)		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Calcium carbonate *(see dust, total & respirable nuisance)*													
Calcium cyanamide		OSHA ID 121				960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Calcium hydroxide		OSHA ID 121		5 mg/m³		960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Calcium hydroxide (calcium)		NIOSH 7020		2 mg/m³		240		1000		4		AA-F	F/CST 225-3-01 77 C/HLD 225-1 87
Calcium hydroxide *(see dust, total & respirable nuisance)*													
Calcium oxide		OSHA ID 121		5 mg/m³		960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Calcium oxide (calcium)		NIOSH 7020		2 mg/m³		240		1000		4		AA-F	F/CST 225-3-01 77 C/HLD 225-1 87
Calcium oxide (elements by ICP HNO_3 digestion)		NIOSH 7303		2 mg/m³		3-10,000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Calcium silicate (particulates, respirable)		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 C/HLD 225-1 87
Calcium silicate (particulates, total)		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Calcium sulfate *(see dust, total & respirable nuisance)*													
Camphor	●	OSHA 07	1130	2 mg/m³		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Camphor (ketones II)		NIOSH 2553		2		1-25		10-200		varies		GC-FID	ST NA SKC
Camphor (ketones II)	●	NIOSH 1301		2		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Caprolactam		OSHA PV2012				100		1000		100 min		HPLC-UV	ST 226-57 36
Capsaicin		NIOSH 5041				480	15	1000	1000	8	15	HPLC-FD	FLT 225-16 79 CST 225-32 87
Captafol (difolatan)		OSHA CSI				240		1000		4		GC-ECD	ST 226-30-16 35
Captan		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
Captan		OSHA PV2093				60		1000		1		HPLC-UV	ST 226-30-16 35
Captan (organonitrogen pesticides)		NIOSH 5601		5 mg/m³		240		1000		4		HPLC-UV	ST 226-58 or ST 226-30-16 35
Carbadox		OSHA CSI				120		1000		2		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Carbaryl		ASTM D 4861				240-7200		1000-5000		4-24		HPLC-UV	PUF 226-92 42
Carbaryl (organonitrogen pesticides)		NIOSH 5601		5 mg/m³		240		1000		4		HPLC-UV	ST 226-58 or ST 226-30-16 35
Carbaryl (Sevin)		NIOSH 5006		5 mg/m³		240		1000		4		VAS	F/CST 225-706 79 C/HLD 225-1 87
Carbaryl (Sevin)		OSHA 63		5 mg/m³		60		1000		1		HPLC-UV	ST 226-30-16 35
Carbazol		OSHA CSI				120		1000		2		GC-FID	ST 226-56 36
Carbendazim (organonitrogen pesticides)		NIOSH 5601				240		1000		4		HPLC-UV	ST 226-58 or ST 226-30-16 35
Carbitol		OSHA PV2013				10		200		50 min		GC-FID	ST 226-01 35
Carbitol acetate		OSHA PV2013				10		200		50 min		GC-FID	ST 226-01 35
Carbofuran		ASTM D 4861				240-7200		1000-5000		4-24		HPLC-UV	PUF 226-92 42
Carbofuran (organonitrogen pesticides)		NIOSH 5601		0.1 mg/m³		240		1000		4		HPLC-UV	ST 226-58 or ST 226-30-16 35
Carbon black		NIOSH 5000		3.5 mg/m³		360		1500		4		GR	FLT 225-8-01 73 CST 225-3LF 86 SCN 225-26 87 C/HLD 225-1 87
Carbon black		OSHA ID 196		3.5 mg/m³		960		2000		8		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Carbon dioxide	●	OSHA ID 172	1026	5000		varies	varies	10-50	300	4-8	15	GC-TCD	SB 253-03 or SB 263-03 52
Carbon dioxide (by portable GC)	●	NIOSH 6603	1027	5000	30,000	varies	varies	20-100	20-100	varies	varies	P GC-TCD	SB 232 Series 50
Carbon disulfide		NIOSH 1600		1	10	10	3	20(50)	200	8(3.3)	15	GC-FPD	ST 226-01 35 DRT 226-44 36
Carbon monoxide	●	OSHA ID 209		50								DRI	DRI 805-18972
Carbon monoxide	●	OSHA ID 210	1021	50		varies	varies	10-50	1000	varies	varies	GC-DID	SB 252-10 or SB 263-10 SB 262-10 or 52
Carbon tetrabromide		OSHA CSI				9	3	50	200	3	15	GC-ECD	ST 226-93 37
Carbon tetrachloride	●	ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
Carbon tetrachloride	●	OSHA 07	1131	10	25	15	3	50	200	5	15	GC-FID	ST 226-01 35
Carbon tetrachloride (hydrocarbons, halogenated)	●	NIOSH 1003			2 (1 hr)		15		10-200		varies	GC-FID	ST 226-01 35
Carbon, activated *(see dust, total nuisance)*													
Carbonyl fluoride		OSHA CSI				480		2000		4		ISE	IMP 225-36-2 59 IT 225-22 59
Carboxin		OSHA CSI				200		1000		3.3		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
3-Carene (terpenes)	●	NIOSH 1552				24		50		8		GC-FID	ST 226-01 35
Catechol (pyrocatechol)		OSHA PV2014				100		1000		100 min		HPLC-UV	ST 226-57 36
Cell fragments (bioaerosols)						15-150		15000		1-10 min		varies	STC 225-9820 81
CELLOSOLVE acetate *(see 2-ethoxyethyl acetate)*	●												
CELLOSOLVE solvent *(see 2-ethoxyethanol)* (alcohols IV)	●	NIOSH 1403	1273										
Cellulose (paper fiber) (particulates, respirable)		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-01-02 95 CST 225-3LF 86

Agency standards for OSHA listings represent the OSHA PELs reported in the 29 CFR 1910.1000 Part 1910, Section 1000.

References and abbreviations are found on pages 196-197.

Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Cellulose (paper fiber) (particulates, total)		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Cellulose *(see dust, total or respirable nuisance)*													
Cellulose insulation		NIOSH 7404				varies		1000		varies		SEM	FLT/CL 225-1604 78
Cerium		OSHA ID 121				960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Cesium hydroxide		OSHA CSI				960		2000		8		AA	F/CST 225-3-01 77 C/HLD 225-1 87
Chaetomium species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Chaetomium species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Chloramphenicol		OSHA CSI				60		1000		1		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Chlordane		NIOSH 5510		0.5 mg/m³		150		1000		2.5		GC-ECD	ST 226-107 37 FLT 225-5 76 CST 225-2LF 86 SCN 225-26 87 C/HLD 225-1 87
Chlordane		OSHA 67	1013	0.5 mg/m³		480		1000		8		GC-ECD	ST 226-30-16 35
Chlordane (non-occupational exposure)		ASTM D 4947	1417			240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
Chlordane (technical)		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
Chlorinated & organonitrogen herbicides		NIOSH 5602				480		1000		8		GC-ECD	ST 226-58 36
Chlorinated & organonitrogen herbicides (hand wash)		NIOSH 9200										GC-ECD	NA SKC
Chlorinated camphene (toxaphene)		NIOSH 5039		LFC		30	15	1000	1000	0.5	15	GC-ECD	F/CST 225-3-01 77 C/HLD 225-1 87
Chlorinated diphenyl ether (chlorinated diphenyl oxide)		NIOSH 5025		0.5 mg/m³		180		1000		3		GC-ECD	F/CST 225-3-01 77 C/HLD 225-1 87
Chlorinated diphenyl oxide		NIOSH 5025		0.5 mg/m³		90		1000		1.5		GC-ECD	F/CST 225-3-01 77 C/HLD 225-1 87
Chlorinated hydrocarbons (screening)		NIOSH 2549				5		20		4		GC-MS	ST 226-330 39
Chlorinated terphenyl (60% chlorine)		NIOSH 5014				720		1500		8		GC-ECD	F/CST 225-706 79 C/HLD 225-1 87
Chlorine	●	NIOSH 6011	1332	0.5	1	90	15	1000	1000	1.5	15	IC	CF/CST 225-9006 61 C/HLD 225-1 87
Chlorine	●	OSHA ID 101	1052		1 (C)	240	15	1000	1000	4	15	ISE	IMP 225-36-2 59 IT 225-22 59
Chlorine (prefiltered)		OSHA ID 101	1289		1 (C)	240	15	1000	1000	4	15	ISE	IMP 225-36-2 59 IT 225-22 59 CST 225-3-23** 86 SP 225-2901** 87 FLT 225-2708** 74
Chlorine dioxide		OSHA ID 202	1462	0.1		120	7.5	500	500	4	15	IC-ECN	IMP 225-36-2 59 IT 225-22 59
Chlorine trifluoride		OSHA CSI			0.1		15		1000		15	ISE	IMP 225-36-2 59 IT 225-22 59
1-Chloro-1-nitropropane		OSHA CSI		20		12		50		4		GC-FID	ST 226-113 37
1-Chloro-2-methyl benzene (o-chlorotoluene, OXSOL 10)	●				50							GC-FID	PS 575-001 or PS 575-002 64
5-Chloro-2-methyl-4-isothiazolin-3-one (Kathon 886)		NON 55		0.75 mg/m³	0.23 mg/m³	50	7.5	200	500	4	15	HPLC-UV	ST 226-99 37
1-Chloro-4-(trifluoromethyl)benzene (parachlorobenzotrifluoride)	●	OSHA CSI				6		100		1		GC-FID	ST 226-01 35
2-Chloro-6-trichloromethyl pyridine (respirable dust)		OSHA CSI		15 mg/m³		480		1000		8		HPLC-UV	ST 226-30-16 35 CYC 225-105 94
2-Chloro-6-trichloromethyl pyridine (total dust)		OSHA CSI		5 mg/m³		varies		varies		varies		HPLC-UV	ST 226-30-16 35
Chloroacetaldehyde		NIOSH 2015			1		3		200		15	GC-ECD	ST 226-15GWS 35
Chloroacetaldehyde		OSHA 76			1 (C)		2.5		500		5	GC-ECD	ST 226-15GWS 35
Chloroacetic acid		NIOSH 2008				48		100		8		IC-ECN	ST 226-47-01 36
alpha-Chloroacetophenone (phenacylchloride)		OSHA CSI		0.05		12		200		1		HPLC-UV	ST 226-35-02 35
Chloroacetyl chloride		OSHA CSI				10		50		3.3		HPLC-UV	ST NA SKC
o-Chloroaniline		OSHA CSI				5		20		4		HPLC-UV	ST 226-10 35
p-Chloroaniline		OSHA PV2109				6		100		1		HPLC-UV	ST 226-10 35
Chlorobenzene (monochlorobenzene)	●	ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
Chlorobenzene (monochlorobenzene)	●	OSHA 07	1132	75		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Chlorobenzene (monochlorobenzene) (hydrocarbons, halogenated)	●	NIOSH 1003				10		10-200		varies		GC-FID	ST 226-01 35
4-Chlorobenzotrifluoride	●	NIOSH 1026				0.1-10.0		10-200		varies		GC-FID	ST 226-01 35
4-Chlorobenzotrifluoride	●	OSHA CSI				6		100		1		GC-FID	ST 226-01 35
p-Chlorobenzotrifluoride	●	NIOSH 1026				0.1-10.0		10-200		varies		GC-FID	ST 226-01 35
p-Chlorobenzotrifluoride	●	OSHA CSI				6		100		1		GC-FID	ST 226-01 35
Chlorobiphenyl		NIOSH 5503		0.001 mg/m³ (10 hr)		48		100(200)		8(4)		GC-ECD	FLT 225-16 79 CST 225-32 87 ST 226-39 36
Chlorobromomethane	●	OSHA CSI		200		5		20		4		GC-FID	ST 226-01 35
Chlorobromomethane (hydrocarbons, halogenated)	●	NIOSH 1003		200		5		10-200		varies		GC-FID	ST 226-01 35
Chlorodifluoromethane		OSHA CSI				1		50		20 min		GC-FID	ST NA SKC
Chlorodiphenyl		OSHA CSI				60		1000		1		GC-ECD	ST 226-30-16 35
Chlorodiphenyl (21% Cl) *(see polychlorinated biphenyls)*		OSHA CSI											
Chlorodiphenyl (32% Cl) *(see polychlorinated biphenyls)*		OSHA CSI											
Chlorodiphenyl (42% Cl)		OSHA PV2089			1	60		1000		1		GC-ECD	ST 226-30-16 35
Chlorodiphenyl (42% Cl) *(see polychlorinated biphenyls)*		NIOSH 5503											
Chlorodiphenyl (48% Cl) *(see polychlorinated biphenyls)*		OSHA CSI											
Chlorodiphenyl (54% Cl)		OSHA PV2088			0.5	60		1000		1		GC-ECD	ST 226-30-16 35
Chlorodiphenyl (54% Cl) *(see polychlorinated biphenyls)*		NIOSH 5503											
Chlorodiphenyl (60% Cl) *(see polychlorinated biphenyls)*		OSHA CSI											
Chlorodiphenyl (62% Cl) *(see polychlorinated biphenyls)*		OSHA CSI											
Chloroethane (ethyl chloride)		NIOSH 2519				3		50		1		GC-FID	ST 226-09 35
2-Chloroethanol (ethylene chlorohydrin)		NIOSH 2513			1	10		20(50)		8(3.3)		GC-FID	ST 226-81A 36
Chloroform (trichloromethane)	●	ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
Chloroform (trichloromethane)	●	OSHA 05	1062		50 (C)	10		200		50 min		GC-FID	ST 226-01 35
Chloroform (trichloromethane) (hydrocarbons, halogenated)	●	NIOSH 1003	1269		2		15		10-200		varies	GC-FID	ST 226-01 35
bis-Chloromethyl ether		OSHA 10				50		500		100 min		GC-ECD	IMP 225-36-2 59 IT 225-22 59
Chloromethyl methyl ether		NON 29	1251			2.4	0.3	10	20	4	15	GC-ECD	ST 226-125 38

Agency standards for OSHA listings represent the OSHA PELs reported in the 29 CFR 1910.1000 Part 1910, Section 1000.

References and abbreviations are found on pages 196-197.

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Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Chloromethyl methyl ether		OSHA 10				50		500		100 min		GC-ECD	IMP 225-36-2 59 IT 225-22 59
4-Chloronitrobenzene (nitrobenzenes)		NIOSH 2005		0.1 ppm		96		200		8		GC-FID	ST 226-10 35
Chloropentafluoroethane		OSHA CSI				2.5		50		50 min		GC-FID	ST 226-01 35
Chlorophene		OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-35 35
o-Chlorophenol		OSHA CSI				40		200		3.3		HPLC-UV	ST 226-10 35
p-Chlorophenol		NIOSH 2014				24		50		8		HPLC-UV	ST 226-10 35
Chloropicrin		NON 51		0.1		144		100		24		GC-MSD	ST 226-175 38
Chloropicrin		OSHA PV2103		0.1		3		200		15 min		GC-ECD	ST 226-93 37
beta-Chloroprene		NIOSH 1002			1 (15 min)	1.5		100			15	GC-FID	ST 226-01 35
beta-Chloroprene		OSHA 07	1133	25		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
beta-Chloroprene		OSHA 112		25		6		50		2		GC-ECD	ST 226-111A 37
o-Chlorostyrene	●	OSHA CSI				20	3	200	200	100 min	15	GC-FID	ST 226-01 35
Chlorothalonil		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
Chlorothalonil		OSHA CSI				180		1000		3		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
o-Chlorotoluene	●	OSHA CSI				20		200		100 min		GC-FID	ST 226-01 35
Chlorotoluron		ASTM D 4861				240-7200		1000-5000		4-24		HPLC-UV	PUF 226-92 42
Chlorotrifluoroethylene		OSHA CSI				10		200		50 min		GC-FID	ST 226-01 35
Chlorpropham (organonitrogen pesticides)		NIOSH 5601				240		1000		4		HPLC-UV	ST 226-58 or ST 226-30-16 35
Chlorpyrifos (Dursban)		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
Chlorpyrifos (Dursban)		OSHA 62	1394			480		1000		8		GC-FPD	ST 226-30-16 35
Chlorpyrifos (organophosphorus pesticides)		NIOSH 5600		0.2 mg/m³		240		1000		4		GC-FPD	ST 226-58 36
Chromic acid & chromates (as CrO_3)		OSHA ID 215 (V2)	1439	0.005 mg/m³		960		2000		8	15	IC-UV	F/CST 225-802 Ω 73 C/HLD 225-1 87
Chromic acid & chromates (chromium hexavalent)		NIOSH 7600		1 µg/m³ (10 hr)		240		1000		4		VAS	F/CST 225-803 73 C/HLD 225-1 87
Chromic acid & chromates (chromium hexavalent)		NIOSH 7604		1 µg/m³ (10 hr)		960		2000		8		IC-ECN	F/CST 225-803 73 C/HLD 225-1 87
Chromium & compounds (as Cr)		NIOSH 7024	1457	0.5 mg/m³		10 - 1000		1000 - 3000		varies		AA-F	F/CST 225-3-01 or F/CST 225-8410 77 C/HLD 225-1 87
Chromium (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥		0.5 mg/m³		5-1000		1000-4000		varies		ICP-AES	F/CST 225-3-01 or F/CST 225-803 73 C/HLD 225-1 87
Chromium (elements by ICP HNO_3 digestion)		NIOSH 7303		0.5 mg/m³		8-500,000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Chromium (elements by ICP HNO_3/$HClO_4$ ashing)		NIOSH 7300	1455	0.5 mg/m³		5-1000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Chromium (elements on wipes)		NIOSH 9102				wipe						ICP-AES	W 225-2414 124 TMP 225-2403 or TMP 225-2415 124
Chromium acetate		OSHA ID 121				960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Chromium carbonate		OSHA ID 121				960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Chromium metal & insoluble compounds		OSHA ID 121	1043	1 mg/m³		960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Chromium metal & insoluble compounds		OSHA ID 125G		1 mg/m³		480		2000		4		ICP-AES	F/CST 225-3-01 or F/CST 225-3100 77 C/HLD 225-1 87
Chromium phosphate		OSHA ID 121				960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Chromium soluble salts (except hexavalent)		OSHA ID 121				960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Chromium trioxide (CR(VI))		OSHA ID 215 (V2)	1439	0.005 mg/m³		960		2000		8		IC-UV	F/CST 225-802 Ω 73 C/HLD 225-1 87
Chromium, hexavalent		ASTM D 6832				varies		1000-5000		varies		IC	F/CST 225-802 or F/CST 225-1713 or F/CST 225-709 or F/CST 225-401 79
Chromium, hexavalent		NIOSH 7600	1032	1 µg/m³ (10 hr)		240		1000		4		VAS	F/CST 225-802 73 C/HLD 225-1 87
Chromium, hexavalent		NIOSH 7604	1032	1 µg/m³ (10 hr)		240		1000		4		IC-ECN	F/CST 225-802 73 C/HLD 225-1 87
Chromium, hexavalent		NIOSH 7605		0.001 mg/m³ (10 hr)		1-400		1000-4000		varies		IC-PCD-UV	F/CST 225-802 73 C/HLD 225-1 87
Chromium, hexavalent		NIOSH 7703		0.001 mg/m³ (10 hr)		10-1200		1000-4000		varies		P VAS	F/CST 225-802 73 C/HLD 225-1 87
Chromium, hexavalent		OSHA ID 103			0.005 mg/m³ (C)	960	30	2000	2000	8	15	DPP	F/CST 225-802 73 C/HLD 225-1 87
Chromium, hexavalent		OSHA W4001			0.005 mg/m³ (C)							IC-UV	FLT 225-8-01-1 or FLT 225-1822 79
Chromium, hexavalent (CR(VI))		OSHA ID 215 (V2)	1439	0.005 mg/m³		960		2000		8		IC-UV	F/CST 225-802 Ω 73 C/HLD 225-1 87
Chromium, hexavalent (in settled dust)		NIOSH 9101				bulk	bulk					CLR or VAS or IC	
Chrysene		OSHA 58		0.2 mg/m³		960		2000		8		GR & HPLC-FD, or GR & HPLC-UV	FLT 225-7 79 CST 225-2LF 86 C/HLD 225-1 87
Chrysene (polynuclear aromatic hydrocarbons by GC-MS)		ASTM D 6209				350 m³ (max)		225 L/min		1-24		GC-MS	PUF 226-131 43 FLT 225-1821 79
Chrysene (polynuclear aromatic hydrocarbons by GC)		NIOSH 5515		LFC		480		2000		4		GC-FID	F/CST 225-1713 74 ST 226-30-04 35 C/HLD 225-1 87
Chrysene (polynuclear aromatic hydrocarbons by HPLC)		NIOSH 5506		LFC		480		2000		4		HPLC-UV	F/CST 225-1713 74 ST 226-30-04 35 C/HLD 225-1 87
Chrysosporium species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Chrysosporium species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Chrysotile *(see asbestos fibers)*		NIOSH 9000				bulk						XRD	
Chrysotile fibers *(see asbestos fibers)*		NIOSH 7400											
Cladosporium species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Cladosporium species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Clopidol (respirable fraction)		OSHA CSI		5 mg/m³		varies		varies		varies		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87 CYC 225-105 94
Clopidol (total dust)		OSHA CSI		15 mg/m³		120		1000		2		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Co-Ral (coumaphos)		OSHA CSI				480		1000		8		GC-FPD	ST 226-30-16 35
Coal dust (< 5% SiO_2)		OSHA CSI		2.4 mg/m³/(%SiO_2+2)		varies		varies		varies		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-105 94 CST 225-3LF 86

Agency standards for OSHA listings represent the OSHA PELs reported in the 29 CFR 1910.1000 Part 1910, Section 1000.

References and abbreviations are found on pages 196-197.

Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	CLG/STEL (ppm)	Vol. (liter) TWA	CLG/STEL	Rate (ml/min) TWA	CLG/STEL	Time TWA (hrs)	CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Coal dust (> 5% SiO_2)		OSHA ID 142		(10 mg/m³)/ (%SiO_2+2)		varies		varies		varies		GR & XRD	F/CST 225-803 73 C/HLD 225-1 87 CYC 225-105 94 CST 225-3LF 86
Coal tar naphtha (naphthas)		NIOSH 1550		100		3		20		2.5		GC-FID	ST 226-01 35
Coal tar pitch volatiles		OSHA 58	1076	0.2 mg/m³		960		2000		8		GR & HPLC-FD, or GR & HPLC-UV	FLT 225-7 79 CST 225-2LF 86 C/HLD 225-1 87
Cobalt		OSHA ID 213		0.1 mg/m³		480		2000		6		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Cobalt (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥		0.5 mg/m³ (dust, fume)		25-2000		1000-4000		varies		ICP-AES	F/CST 225-3-01 or F/CST 225-803 73 C/HLD 225-1 87
Cobalt (elements by ICP HNO_3 digestion)		NIOSH 7303		0.5 mg/m³ (dust, fume)		3-500,000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Cobalt (elements by ICP HNO_3/$HClO_4$ ashing)		NIOSH 7300	1455	0.05 mg/m³ (dust, fume)		25-2000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Cobalt (elements on wipes)		NIOSH 9102				wipe						ICP-AES	W 225-2414 124 TMP 225-2403 or TMP 225-2415 124
Cobalt & compounds (as Co)		NIOSH 7027		0.05 mg/m³		960		2000		8		AA-F	F/CST 225-3-01 77 C/HLD 225-1 87
Cobalt acetate		OSHA ID 125G				480		2000		4		ICP-AES	F/CST 225-3-01 or F/CST 225-3100 77 C/HLD 225-1 87
Cobalt carbonyl		OSHA ID 121				960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Cobalt hydrocarbonyl		OSHA ID 121	1193	0.1 mg/m³ (as Co)		960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Cobalt metal, dust & fume		OSHA ID 125G		0.1 mg/m³		480		2000		4		ICP-AES	F/CST 225-3-01 or F/CST 225-3100 77 C/HLD 225-1 87
Cobalt metal, dust & fume (as Co)		OSHA ID 121	1210	0.1 mg/m³		960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Coke oven emissions		OSHA 58		0.15 mg/m³		960		2000		8		GR & HPLC-FD, or GR & HPLC-UV	FLT 225-7 79 CST 225-2LF 86 C/HLD 225-1 87
Command (dimethazone)		OSHA PV2066				60		1000		1		GC-ECD	ST 226-30-16 35
Copper (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥		1 mg/m³ (dust) 0.1 mg/m³ (fume)		5-1000		1000-4000		varies		ICP-AES	F/CST 225-3-01 or F/CST 225-803 73 C/HLD 225-1 87
Copper (elements by ICP HNO_3 digestion)		NIOSH 7303		1 mg/m³ (dust) 0.1 mg/m³ (fume)		15-500,000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Copper (elements by ICP HNO_3/$HClO_4$ ashing)		NIOSH 7300	1455	1 mg/m³ (dust) 0.1 mg/m³ (fume)		5-1000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Copper (elements on wipes)		NIOSH 9102				wipe						ICP-AES	W 225-2414 124 TMP 225-2403 or TMP 225-2415 124
Copper dust		NIOSH 7029		1 mg/m³		480		1000		8		AA-F	F/CST 225-3-01 77 C/HLD 225-1 87
Copper dusts & mists		OSHA ID 125G		1 mg/m³		480		2000		4		ICP-AES	F/CST 225-3-01 or F/CST 225-3100 77 C/HLD 225-1 87
Copper dusts & mists (as Cu)		OSHA ID 121	1205	1 mg/m³		960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Copper fume		NIOSH 7029		0.1 mg/m³		480		1000		8		AA-F	F/CST 225-3-01 77 C/HLD 225-1 87
Copper fume		OSHA ID 121	1206	0.1 mg/m³		960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Copper fume		OSHA ID 125G		0.1 mg/m³		480		2000		4		ICP-AES	F/CST 225-3-01 or F/CST 225-3100 77 C/HLD 225-1 87
Copper fume (ICP analysis of metal/metalloid particulates from solder operations)		OSHA ID 206		0.1 mg/m³		480		2000		4		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Corn starch *(see dust, respirable nuisance)*													
Coronene		OSHA CSI				960		2000		8		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Corundum (Al_2O_3) *(see alpha-alumina [total dust])*													
Corundum (emery) (particulates, respirable)		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-01-02 95 CST 225-3LF 86
Corundum (emery) (particulates, total)		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Corynebacterium species (bacteria)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Cotton dust (raw)		OSHA CSI		1 mg/m³		2664		7.4		6		GR	FLT 225-8-01 73 VERT. ELUTRIATOR (NA SKC) and CST 225-3LF 86
Cotton Dust (raw)		OSHA CSI		1 mg/m³		960		2		8		GR	FLT 225-8-01-1 73 SP 225-27 with PPI 225-381 ♠ and IS 225-388 or PPI 225-386 ♠ 96
Coumarin		OSHA CSI				96		200		8		HPLC-UV	ST 226-30-04 35
Crag herbicide (respirable dust)		OSHA CSI		5 mg/m³		varies		varies		varies		CLR	F/CST 225-803 73 C/HLD 225-1 87 CYC 225-105 94
Crag herbicide (total dust)		OSHA CSI		15 mg/m³		90		1500		1		CLR	F/CST 225-3-01 77 C/HLD 225-1 87
p-Cresidine *(see 5-methyl-o-anisidine)*		OSHA CSI											
di-tert-butyl-p-Cresol		OSHA PV2108				100		1000		100 min		GC-FID	ST 226-57 36
Cresol (all isomers)		NIOSH 2546		10 mg/m³		24		100		4		GC-FID	ST 226-95 37
Cresol (all isomers)		OSHA 32		5 mg/m³		24		100		4		HPLC-UV	ST 226-95 37
Cresols *(see Environmental Sampling Guide)*		EPA TO-8											
Cresylil acid *(see cresol, all isomers)*		OSHA CSI											
Cristobalite		OSHA ID 142				varies		varies		varies		GR & XRD	F/CST 225-803 73 C/HLD 225-1 87 CYC 225-105 94
Cristobalite (silica, crystalline [respirable] by XRD)		NIOSH 7500	1370	0.05 mg/m³		400-1000		2500		varies		XRD	F/CST 225-803 73 CYC 225-01-02 95 C/HLD 225-1 87
Cristobalite (silica, crystalline by IR)		NIOSH 7602		0.05 mg/m³		400-800		2500		varies		IR	F/CST 225-803 73 C/HLD 225-1 87 CYC 225-01-02 95
Cristobalite (silica, crystalline by VAS)		NIOSH 7601	1041	0.05 mg/m³		400-800		2500		varies		VAS	F/CST 225-803 73 C/HLD 225-1 87 CYC 225-01-02 95
Crocidolite fibers *(see asbestos fibers)*		NIOSH 7400											

Agency standards for OSHA listings represent the OSHA PELs reported in the 29 CFR 1910.1000 Part 1910, Section 1000.

References and abbreviations are found on pages 196-197.

C

Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Crotonaldehyde	●	ASTM D 5197				varies		500-1200		5 min-24 hrs		HPLC-UV	ST 226-120 ○ or ST 226-119 37
Crotonaldehyde	●	NIOSH 3516		2		48		200		4		DPP	IMP 225-36-2 59 IT 225-22 59
Crotonaldehyde	●	OSHA 81		2		6		100		1		HPLC-UV	CF/CST 225-9019 61 C/HLD 225-1 87
Crotonaldehyde (aldehydes, screening)	●	NIOSH 2539		2		5		20		4		GC-FID & GC-MS	ST 226-118 37
Crufomate		OSHA PV2015				60		1000		1		GC-FPD	ST 226-30-16 35
Cryolite (fluorides)		NIOSH 7902		2.5 mg/m³		480		1000		8		ISE	CF/CST 225-9001 61 C/HLD 225-1 87
Cumene (isopropyl benzene)	●	OSHA 07	1065	50		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Cumene (isopropyl benzene)	●	OSHA PV2137		50		24		200		2		GC-FID	ST 226-01 35
Cumene (isopropyl benzene) (hydrocarbons, aromatic)	●	NIOSH 1501		50 (skin)		1-30		10-200		8(3.3)		GC-FID	ST 226-01 35
Cumene hydroperoxide		OSHA CSI				120		1000		2		HPLC-UV	IMP 225-36-1 59 IT 225-22 59
Cunninghamella species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Cunninghamella species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Cupric carbonate as Cu (elements by ICP HNO_3/$HClO_4$ ashing)		NIOSH 7300	1455			960		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Curvularia species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Curvularia species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Cyanamide		OSHA CSI				10		100		100 min		HPLC-UV	ST 226-30-18 35
Cyanazine		NIOSH 5602				480		1000		8		GC-ECD	ST 226-58 36
Cyanide (as Cn)		OSHA ID 120		5 mg/m³		120		1000		2		ISE	F/CST 225-3-01 77 IT 225-22 59 IMP 225-36-2 59
Cyanides, aerosol & gas		NIOSH 7904			5 mg/m³ (10 min)	120		500		4		ISE	FLT 225-2705 Δ 74 IMP 225-36-2 59 C/HLD 225-1 87 CST 225-2LF 86 IT 225-22 59
Cyanogen		OSHA PV2104				12		200		1		GC-NPD	ST 226-117 37
Cyanogen chloride		OSHA CSI				1		200		5		GC-NPD	ST 226-117 37
Cyanuric acid		NIOSH 5030				480		1000		8		HPLC-UV	F/CST 225-802 73 C/HLD 225-1 87
Cyclohexane	●	OSHA 07	1134	300		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Cyclohexane (hydrocarbons, BP 36 to 216 C)	●	NIOSH 1500	1268	300		2.5-5		10-200		varies		GC-FID	ST 226-01 35
Cyclohexanol	●	OSHA 07	1135	50		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Cyclohexanol (alcohols combined)	●	NIOSH 1405		50 (skin)		1-10		10-200		varies		GC-FID	ST 226-01 35
Cyclohexanol (alcohols III)	●	NIOSH 1402		50		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Cyclohexanone	●	OSHA 01	1073	50		10		20(50)		8(3.3)		GC-FID	ST 226-110 37
Cyclohexanone (ketones I)	●	NIOSH 1300		25		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Cyclohexanone (ketones I)		NIOSH 2555				1-10		10-200		varies		GC-FID	ST NA SKC
Cyclohexene	●	OSHA 07	1124	300		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Cyclohexene (hydrocarbons, BP 36 to 216 C)	●	NIOSH 1500		300		5-7		10-200		varies		GC-FID	ST 226-01 35
N-Cyclohexyl-2-benzothiazolesulfenamide		OSHA CSI				480		2000		4		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Cyclohexylamine		OSHA PV2016				20		200		100 min		GC-FID	ST 226-98 37
Cyclonite (RDX)		OSHA CSI		1.5 mg/m³ (skin)		120		1000		2		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Cyclopentane		OSHA CSI				5		200		25 min		GC-FID	ST 226-01 35
Cyhexatin		OSHA ID 197SG				480		2000		4		AA-GF	F/CST 225-709 79 C/HLD 225-1 87 ST 226-30 35
Cypermethrin		OSHA PV2063				60		1000		60 min		GC-ECD	ST 226-30-16 35
2,4-D (2-butoxyethyl ester)		NIOSH 5602				480		1000		8		GC-ECD	ST 226-58 36
2,4-D (2-butoxyethyl ester)		NIOSH 5602				480		1000		8		GC-ECD	ST 226-58 36
2,4-D (2,4-dichlorophenoxyacetic acid)		NIOSH 5001		10 mg/m³		180		1000		3		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
2,4-D (2,4-dichlorophenoxyacetic acid)		OSHA CSI		10 mg/m³		180		3000		1		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
D & C red #19		OSHA CSI				240		1000		4		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
2,4-D acid		NIOSH 5602		10		480		1000		8		GC-ECD	ST 226-58 36
2,4-D, BE		NIOSH 5602				480		1000		8		GC-ECD	ST 226-58 36
2,4-D, EH		NIOSH 5602				480		1000		8		GC-ECD	ST 226-58 36
2,4-D, ME (2,4-dichlorophenoxyacetic acid)		NIOSH 5602				480		1000		8		GC-ECD	ST 226-58 36
Dacthal		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
DAP (diallyl phthalate)		OSHA CSI				60		1000		1		GC-FID	ST 226-30-16 35
DBP *(see dibutyl phthalate)*		OSHA 104											
p,p-DDE		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
DDT		OSHA CSI		1 mg/m³		90		1500		1		GC-ECD	F/CST 225-709 79 C/HLD 225-1 87
p,p-DDT		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
DDVP (dichlorvos)		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
Decaborane		OSHA CSI		0.05		480	30	2000	2000	4	15	ICP	F/CST 225-3-01 77 C/HLD 225-1 87
Decabromodiphenyl oxide		NIOSH 2559				48-960		2000		varies		HPLC-UV	FLT 225-1822 79 CST 225-2LF 86 SP 225-27 87
Decabromodiphenyl oxide		OSHA CSI				200		1000		3		GC-ECD	F/CST 225-709 79 C/HLD 225-1 87
n-Decane (hydrocarbons, BP 36 to 216 C)	●	NIOSH 1500				2		10-50		varies		GC-FID	ST 226-01 35
Decyl alcohol	●	OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-01 35
DEHP *(see di-2-ethylhexyl phthalate)*		OSHA 104											
Dehydroabietic acid		OSHA CSI				180		2000		1.5		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Dehydroisoandrosterone		OSHA CSI				240		1000		4		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Demeton		NIOSH 5514		0.1 mg/m³		480		1000		8		GC-FPD	FLT 225-5 76 CST 225-2LF 86 C/HLD 225-1 87 SCN 225-26 87 ST 226-30-05 35
Demeton (Systox)		OSHA CSI		0.1 mg/m³		480		1000		8		GC-FPD	ST 226-30-16 35
Demosan		OSHA CSI				960		2000		8		GC-ECD	F/CST 225-709 79 C/HLD 225-1 87

Agency standards for OSHA listings represent the OSHA PELs reported in the 29 CFR 1910.1000 Part 1910, Section 1000.

References and abbreviations are found on pages 196-197.

Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
DEP *(see diethyl phthalate)*		OSHA 104											
Desflurane	●	OSHA 106	1760			3		50		1		GC-FID	ST 226-81A 36
Di-(2-ethylhexyl) adipate		OSHA CSI				180		1000		3		GC-FID	FLT 225-17-04 74 C/HLD 225-1 87 CST 225-3LF 86
Di-(2-ethylhexyl) phthalate		OSHA CSI		5 mg/m³		60	15	1000	1000	1	15	GC-FID	ST 226-30-16 35
Di-(2-ethylhexyl) phthalate (DEHP)		NIOSH 5020				180		1000		3		GC-FID	F/CST 225-3-01 77 C/HLD 225-1 87
Di-n-hexyl phthalate		OSHA PV2076				240		1000		4		GC-FID	ST 226-56 36
Di-n-octyl phthalate (DNOP)		OSHA 104				240		1000		4		GC-FID	ST 226-56 36
Di-n-octyl-phthalate (DNOP)		OSHA CSI				90		1000		1.5		GC-ECD	ST 226-56 36
Di-sec-octyl phthalate *(see di-[2-ethylhexy] phthalate)*													
Di(ethyleneglycol) ethyl ether acrylate		OSHA PV2132		1 mg/m³		48		200		4		GC-FID	ST 226-110 37
Diacetone alcohol	●	OSHA 07	1123	50		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Diacetone alcohol (alcohols combined)	●	NIOSH 1405		50		1-10		10-200		varies		GC-FID	ST 226-01 35
Diacetone alcohol (alcohols III)	●	NIOSH 1402		50		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Diacetyl		NIOSH 2557				6		100		1		GC	ST NA SKC
Diacetyl		OSHA 1012		0.05		9	3	50	200	3	15	GC-FID	ST 226-183 38
Diacetyl		OSHA 1013		0.05		9	3	50	200	3	15	GC-FID	ST 226-183 38
Diallyl disulfide		OSHA PV2086				10		20(50)		8(3.3)		GC-FPD	ST 226-110 37
Diallyl phthalate		OSHA CSI				60		1000		1		GC-FID	ST 226-30-16 35
1,2-Diaminoethane		NIOSH 2540				10		100		1.7		HPLC-UV	ST 226-30-18 35
o-Dianisidine		OSHA 71	1235			100		1000		100 min		GC-ECD	CF/CST 225-9004 61 C/HLD 225-1 87
o-Dianisidine dyes (dyes, benzidine)		NIOSH 5013		LFC		480		1000		8		HPLC-UV	FLT 225-17A 74 C/HLD 225-1 87 CST 225-3LF 86
o-Dianisidine-based dyes		OSHA CSI				480		1000		8		HPLC-UV	FLT 225-17-04 74 C/HLD 225-1 87 CST 225-3LF 86
Diazinon		ASTM D 4861				240-7200			1000-5000	4-24		GC-NPD	PUF 226-92 42
Diazinon		OSHA 62	1396			480		1000		8		GC-FPD	ST 226-30-16 35
Diazinon (organophosphorus pesticides)		NIOSH 5600		0.1 mg/m³		240		1000		4		GC-FPD	ST 226-58 36
Diazomethane		NIOSH 2515		0.2		10		200		50 min		GC-FID	ST 226-23 35
Diazomethane		OSHA CSI		0.2		10		200		50 min		GC-FID	ST 226-23 35
Dibenz(a,h)anthracene		OSHA CSI				960		2000		8		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Dibenz(a,h)anthracene (polynuclear aromatic hydrocarbons by GC-MS)		ASTM D 6209				350 m³ (max)		225 L/min		1-24		GC-MS	PUF 226-131 43 FLT 225-1821 79
Dibenz(a,h)anthracene (polynuclear aromatic hydrocarbons by GC)		NIOSH 5515				480		2000		4		GC-FID	F/CST 225-1713 74 C/HLD 225-1 87 ST 226-30-04 35
Dibenz(a,h)anthracene (polynuclear aromatic hydrocarbons by HPLC)		NIOSH 5506				480		2000		4		HPLC-FD	F/CST 225-1713 74 C/HLD 225-1 87 ST 226-30-04 35
Diborane		NIOSH 6006		0.1		120		1000		2		PES	ST 226-151 38 CST 225-32 87 FLT NA SKC and
Dibrom		OSHA CSI		3 mg/m³		60		1000		1		GC-FPD	ST 226-30-16 35
1,2-Dibromo-3-chloropropane (DBCP)		OSHA CSI		1 ppb		10		20(50)		8(3.3)		GC-ECD	ST 226-81A 36
Dibromodifluoromethane (difluorodibromomethane)		NIOSH 1012		100		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
1,2-Dibromoethane (ethylene dibromide)	●	ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
1,2-Dibromoethane (ethylene dibromide)	●	NIOSH 1008		0.045	0.13	24	3	50	200	8	15	GC-ECD	ST 226-01 35
Dibutyl amine		OSHA CSI				120		1000		2		GC-NPD	IMP 225-36-2 59 IT 225-22 59
2-Dibutyl aminoethanol (aminoethanol compounds I)		NIOSH 2007		2		10		20(50)		8(3.3)		GC-FID	ST 226-10-04 35
Dibutyl phosphate		NIOSH 5017		1	2	240		2000		2		GC-FPD	FLT 225-17-01 74 C/HLD 225-1 87 CST 225-2LF 86
Dibutyl phthalate		NIOSH 5020		5 mg/m³		100		1000		100 min		GC-FID	F/CST 225-3-01 77 C/HLD 225-1 87
Dibutyl phthalate (DBP)		OSHA 104		5 mg/m³		240		1000		4		GC-FID	ST 226-56 36
Dibutyltin bis (isooctyl mercaptoacetate) (organotin compounds as Sn)		NIOSH 5504		0.1 mg/m³		480		1000		8		HPLC & AA-GF	ST 226-30 35 C/HLD 225-1 87 F/CST 225-709 79
Dibutyltin dilaurate (as Sn)		OSHA ID 218SG				500		1000		500 min		AA	F/CST 225-3-01 77 C/HLD 225-1 87
Dibutyltin maleate (as Sn)		OSHA ID 224SG				200		1000		200 min		AA-GF	F/CST 225-3-01 77 C/HLD 225-1 87
Dicamba		OSHA CSI				200		1000		3.3		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Dicamba sodium salt		OSHA CSI				200		1000		3.3		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
1,1-Dichloro-1-fluoroethane		OSHA 113				1		50		20 min		GC-FID	ST NA SKC
1,1-Dichloro-1-nitroethane		NIOSH 1601		2		10		20(50)		8(3.3)		GC-FID	ST 226-81A 36
1,1-Dichloro-1-nitroethane		OSHA 07			10		15		1000		15	GC-FID	ST 226-81A 36
1,1-Dichloro-1-nitroethane		OSHA CSI			10	10		20		8		GC-FID	ST 226-81A 36
2,2-Dichloro-1,1,1-trifluoroethane		NON 50				9		50		3		GC-FID	ST 226-09 35
3,3-Dichloro-1,1,1,2,2-pentafluoropropane		OSHA CSI				9		50		3		GC-FID	ST 226-01 35
1,3-Dichloro-1,1,2,2,3-pentafluoropropane		OSHA CSI				9		50		3		GC-FID	ST 226-01 35
Dichloroacetylene		OSHA CSI					1		200		5	GC-FID	ST 226-01 35
3,4-Dichloroaniline		OSHA CSI				100		1000		1.5		HPLC	F/CST 225-803 73 C/HLD 225-1 87
m-Dichlorobenzene	●	ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
m-Dichlorobenzene	●	OSHA CSI				10		200		50 min		GC-FID	ST 226-01 35
o-Dichlorobenzene	●	ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
o-Dichlorobenzene	●	OSHA 07	1122		50 (C)		3		200		15	GC-FID	ST 226-01 35
p-Dichlorobenzene	●	ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
p-Dichlorobenzene	●	OSHA 07	1121	75		3	0.75	20	50	2.5	15	GC-FID	ST 226-01 35
o-Dichlorobenzene (hydrocarbons, halogenated)	●	NIOSH 1003			50		3		10-200		varies	GC-FID	ST 226-01 35
p-Dichlorobenzene (hydrocarbons, halogenated)	●	NIOSH 1003		1.7 (LOQ)		3		10-200		varies		GC-FID	ST 226-01 35
3,3'-Dichlorobenzidine		OSHA 65	1238			100		1000		100 min		GC-ECD	CF/CST 225-9004 61 C/HLD 225-1 87

Agency standards for OSHA listings represent the OSHA PELs reported in the 29 CFR 1910.1000 Part 1910, Section 1000.

References and abbreviations are found on pages 196-197.

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Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Dichlorodifluoroethane		OSHA CSI				3		100		30 min		GC-FID	ST 226-01 35
Dichlorodifluoromethane		NIOSH 1018		1000		3		20		2.5		GC-FID	ST 226-01 35 ST 226-09 35
1,2-Dichloroethane (ethylene dichloride)	●	OSHA 07	1119	50	100	10		20(50)		8(3.3)		GC-FID	ST 226-01 35
1,1-Dichloroethane (ethylidene chloride)		ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
1,1-Dichloroethane (ethylidene chloride)		OSHA 07		100		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
1,1-Dichloroethane (hydrocarbons, halogenated)		NIOSH 1003	1267	100		10		10-200		varies		GC-FID	ST 226-01 35
Dichloroethyl ether	●	NIOSH 1004		5	10	10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Dichloroethyl ether	●	OSHA 07			15	10	15	20	1000	8	15	GC-FID	ST 226-01 35
1,2-Dichloroethylene	●	OSHA 07	1118	200		3		20		2.5		GC-FID	ST 226-01 35
cis-1,2-Dichloroethylene	●	ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
1,2-Dichloroethylene (hydrocarbons, halogenated)	●	NIOSH 1003		200		3		10-200		varies		GC-FID	ST 226-01 35
trans-1,2-Dichloroethylene	●												DT 810-174D
Dichlorofluoromethane		NIOSH 2516		10		3		20		2.5		GC-FID	ST 226-25 35
Dichloromethane	●	ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
Dichloromethane *(see methylene chloride)*	●												
Dichloromonofluoromethane (dichlorofluoromethane)		NIOSH 2516		10		3		20		2		GC-FID	ST 226-09 35
Dichloromonofluoromethane (dichlorofluoromethane)		OSHA CSI		1000		3		20		2.5		GC-FID	ST 226-09 ♠ 35
2,4-Dichlorophenoxyacetic acid (2,4-D)		NIOSH 5001		10 mg/m³		180		1000		3		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
1,2-Dichloropropane (propylene dichloride)	●	ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
1,2-Dichloropropane (propylene dichloride)	●	NIOSH 1013		LFC		3		20		2.5		GC-ECN	ST 226-81A 36
1,3-Dichloropropene		OSHA CSI				5		200		25 min		GC-FID	ST 226-01 35
cis-1,3-Dichloropropene	●	ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
trans-1,3-Dichloropropene		ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
3,4-Dichloropropionanilide		OSHA CSI										W	FLT 225-7 79
2,2-Dichloropropionic acid		OSHA PV2017				10		200		50 min		HPLC-UV	ST 226-10 35
Dichlorotetrafluoroethane		OSHA CSI				3		50		1		GC-FID	ST 226-09 35 ST 226-01 35
1,1-Dichlorotetrafluoroethane		OSHA CSI				2		50		40 min		GC-FID	ST 226-01 35 ST 226-09 35
1,2-Dichlorotetrafluoroethane (dichlorodifluoromethane)		NIOSH 1018		1000		3		20		2.5		GC-FID	ST 226-01 35 ST 226-09 35
Dichlorotrifluoroethane		NON 50				9		50		3		GC-FID	ST 226-09 35
Dichlorvos (DDVP)		ASTM D 4861				240-7200		1000- 5000		4-24		GC-ECD	PUF 226-92 42
Dichlorvos (DDVP)		OSHA 62	1395	1 mg/m³		480		1000		8		GC-FPD	ST 226-30-16 35
Dicloran		ASTM D 4861				240-7200		1000- 5000		4-24		GC-ECD	PUF 226-92 42
Dicofol		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
Dicofol		OSHA CSI										W	SM TB 225-24 124
Dicrotophos		ASTM D 4861				240-7200		1000-5000		4-24		HPLC-UV	PUF 226-92 42
Dicrotophos (Bidrin)		OSHA PV2099				480		1000		8		GC-FPD	ST 226-30-16 35
Dicrotophos (organophosphorus pesticides)		NIOSH 5600		0.25 mg/m³		240		1000		4		GC-FPD	ST 226-58 36
Dicyclopentadiene	●	OSHA PV2098				10		100		100 min		GC-FID	ST 226-01 35
Dicyclopentadienyl iron (respirable dust)		OSHA CSI		5 mg/m³		varies		varies		varies		GR	FLT 225-8-01 73 CST 225-3LF 86 C/HLD 225-1 87
Dicyclopentadienyl iron (total dust)		OSHA CSI		15 mg/m³		960		2000		8		AA	F/CST 225-3-01 77 C/HLD 225-1 87
Dieldrin		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
Dieldrin		OSHA CSI		0.25 mg/m³		180		1500		2		GC-ECD	F/CST 225-709 79 C/HLD 225-1 87
Diesel emissions *(see elemental carbon)*		NIOSH 5040										TOA-FID	
Diesel exhaust particles *(see elemental carbon)*		NIOSH 5040										TOA-FID	
Diesel particulate matter		ASTM D 6877				varies		1000-4000		varies		EGA-TOS	DPM 225-317 or F/CST 225-401 84
Diesel particulate matter		MSHA 30CFR57		350 µg/m³ (total carbon)		varies		2000		varies		TOA-FID	DPM 225-317 84 C/HLD 225-1 87 CYC 225-105 85
Diesel particulate matter		MSHA 30CFR57		350 µg/m³ (total carbon)		varies		varies		varies		TOA-FID	F/CST 225-401 84 C/HLD 225-1 87 CYC 225-100 94
Diethanolamine		OSHA PV2018				10		100		100 min		HPLC-UV	ST 226-30-18 35
Diethanolamine (DEA) (aminoethanol compounds II)		NIOSH 3509	1006	3		240		1000		4		IC	IMP 225-36-1 59 IT 225-22 59
Diethyl ether (ethyl ether)	●	NIOSH 1610				0.25-3		10-200		varies		GC-FID	ST 226-01 35
Diethyl ketone (3-pentanone)		OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST NA SKC
Diethyl phthalate (DEP)		OSHA 104				240		1000		4		GC-FID	ST 226-56 36
Diethyl sulfate		OSHA CSI				15		1000		15 min		GC-FID	ST 226-10 35
Diethylamine	●	OSHA 41	1697	25		10	3	200	200	50 min	15	HPLC	ST 226-96 37
Diethylamine (amines, aliphatic)	●	NIOSH 2010		10	25	24	3	50	200	8	15	GC-FID	ST 226-10 35
2-Diethylaminoethanol		OSHA CSI		10		24		200		2		GC-FID	ST 226-10-04 35
2-Diethylaminoethanol (aminoethanol compounds I)		NIOSH 2007		10		10		20(50)		8(3.3)		GC-FID	ST 226-10-04 35
Diethylaminopropylamine (DEP)		OSHA CSI				100		1000		100 min		GC-NPD	IMP 225-36-1 59 IT 225-22 59
Diethylene dioxide *(see dioxane)*													
Diethylene ether *(see dioxane)*													
Diethylene glycol (glycols)		NIOSH 5523	1387			60		1000		1		GC-FID	ST 226-57 36
Diethylene glycol methyl ether		OSHA CSI				10		100		100 min		GC-FID	ST 226-01 35
Diethylene glycol monobutyl ether acetate		OSHA CSI				9.6		100		1.6		GC-FID	ST 226-01 35
Diethylene glycol monoethyl ether		OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Diethylenetriamine		OSHA 60	1285			10		100		100 min		HPLC-UV	ST 226-30-18 35
Difluorodibromomethane		NIOSH 1012		100		6		50		2		GC-FID	ST 226-01 35
Difluorodibromomethane		OSHA 07		100		10		20		8		GC-FID	ST 226-01 35
Diglycidyl ether of bisphenol A		OSHA CSI				240		1000		4		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87

Agency standards for OSHA listings represent the OSHA PELs reported in the 29 CFR 1910.1000 Part 1910, Section 1000.

References and abbreviations are found on pages 196-197.

Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	CLG/STEL (ppm)	Vol. (liter) TWA	CLG/STEL	Rate (ml/min) TWA	CLG/STEL	Time TWA (hrs)	CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Diglycolamine		OSHA CSI				20		100		3		GC-NPD	IMP 225-36-1 59 IT 225-22 59
Diglyme		OSHA CSI				20		200		100 min		GC-FID	ST 226-01 35
Dihexyl phthalate		OSHA PV2076				240		1000		4		GC-FID	ST 226-56 36
Dihydrocapsaicin		NIOSH 5041				480	15	1000	1000	8	15	HPLC-FD	FLT 225-16 79 CST 225-32 87
Diisobutyl ketone	●	OSHA 07	1116	50		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Diisobutyl ketone (ketones I)	●	NIOSH 1300		25		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Diisobutyl ketone (ketones I)		NIOSH 2555				1-10		10-200		varies		GC-FID	ST NA SKC
Diisocyanates		OSHA 42	1458			240	15	1000	1000	4	15	HPLC-UV or HPLC-FD	CF/CST 225-9002 or 87 C/HLD 225-1 CF/CST 225-9013 61
Diisopropylamine		OSHA CSI		5		120		1000		2		GC-FID	IMP 225-36-1 59 IT 225-22 59
Dimethazone		OSHA PV2066				60		1000		1		GC-ECD	ST 226-30-16 35
Dimethoate		OSHA PV2113				480		1000		8		GC-FPD	ST 226-30-16 35
2,5-Dimethoxyaniline		OSHA CSI				17		50		5.7		HPLC-UV	ST 226-30-04 35
Dimethoxymethane (methylal)	●	NIOSH 1611		1000		2		20		1.5		GC-FID	ST 226-01 35
Dimethoxymethane (methylal)	●	OSHA 07	1115	1000		2		20		1.5		GC-FID	ST 226-01 35
Dimethyl adipate		OSHA PV2019				20		200		100 min		GC-FID	ST 226-01 35
Dimethyl arsenic acid (arsenic, organo-)		NIOSH 5022				960		2000		8		IC-AA	FLT 225-17-01 74 C/HLD 225-1 87 CST 225-2LF 86
Dimethyl disulfide		NON 42	1413			12		1000		12 min		GC-FPD	SB 253-10 or SB 263-10 52
Dimethyl disulfide		OSHA CSI				6		100		1		GC-FID	ST 226-01 35
Dimethyl glutarate		OSHA PV2020				20		200		100 min		GC-FID	ST 226-01 35
Dimethyl phthalate (DMP)		OSHA 104		5 mg/m³		240		1000		4		GC-FID	ST 226-56 36
Dimethyl succinate		OSHA PV2021				20		200		100 min		GC-FID	ST 226-01 35
Dimethyl sulfate		NIOSH 2524	1284	0.1 (8 hrs.)		12		50		4		GC-ECN	ST 226-114 37
Dimethyl sulfate		OSHA PV2147		1		10		100		100 min		GC-FPD	ST 226-115 37
Dimethyl sulfide		NON 42	1413			12		1000		12 min		GC-FPD	SB 263-10 52
Dimethyl sulfide		OSHA CSI				5		20		4		GC-FPD	ST 226-01 35
Dimethyl sulfoxide		OSHA CSI				10		100		100 min		GC-FID	ST 226-01 35
Dimethyl-1,2-dibromo-2,2-dichloroethyl phosphate		OSHA CSI		3 mg/m³		60		1000		1		GC-FPD	ST 226-30-16 35
2,3-Dimethyl-2,3-dinitrobutane		NON 44		0.15 mg/m³ OEL		10		200		50 min		GC-ECD	ST 226-35-03 36
N,N-Dimethyl-p-toluidine (amines, aromatic)		NIOSH 2002	1055			96		200		8		GC-FID or GC-NSD	ST 226-10 35
Dimethylacetamide		NIOSH 2004	1695	10		48		100		8		GC-FID	ST 226-10 35
Dimethylacetamide		OSHA CSI		10		60		1000		1		GC-FID	ST 226-10 35
Dimethylamine	●	NIOSH 2010		10		24		50		8		GC-FID	ST 226-10 35
Dimethylamine	●	OSHA 34	1696	10		10		20		8		HPLC	ST 226-96 37
2-Dimethylamino ethanol		NIOSH 2561				10-24		20-100		varies		GC-FID	ST 226-94 37
1-Dimethylamino-2-propanol		NIOSH 2561				10-24		20-100		varies		GC-FID	ST 226-94 37
4-Dimethylaminoazobenzene		OSHA CSI				60		1000		1		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87 IMP 225-36-1 59 IT 225-22 59
Dimethylaminobenzene		OSHA CSI		5		24		50		8		GC-FID	ST 226-10 35
2,4-Dimethylaminobenzene (amines, aromatic)		NIOSH 2002		2		24		50		8		GC-FID or GC-NSD	ST 226-10 35
N,N-Dimethylaniline	●	OSHA 07		5		10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
N,N-Dimethylaniline	●	OSHA PV2064		5		30		200		2.5		GC-FID	ST 226-98 37
N,N-Dimethylaniline (amines, aromatic)	●	NIOSH 2002	1054	5	10	24	3	50	200	8	15	GC-FID or GC-NSD	ST 226-10 35
2,5-Dimethylbenzaldehyde		ASTM D 5197				varies		500-1200		5 min-24 hrs		HPLC-UV	ST 226-120 ○ or ST 226-119 37
trans-1,4-Dimethylcyclohexane	●	OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-01 35
trans-1,2-Dimethylcyclohexane	●											GC-FID	PS 575-001 64
N,N-Dimethylethanolamine		NIOSH 2561				10-24		20-100		varies		GC-FID	ST 226-94 37
N,N-Dimethylethanolamine		OSHA CSI				24		50		8		GC-FID	ST 226-10-04 35
N,N-Dimethylethylamine		OSHA PV2096				40		100		40 min		GC-NPD	ST 226-18 35
N,N-Dimethylformamide	●	NIOSH 2004		10		24		50		8		GC-FID	ST 226-10 35
N,N-Dimethylformamide	●	OSHA 66	1271	10		9.6	3	20	200	8	15	GC-NPD	ST 226-01 35
1,1-Dimethylhydrazine		NIOSH 3515		0.06 (120 min)		60		1000		1		VAS	IMP 225-36-2 59 IT 225-22 59
1,1-Dimethylhydrazine		OSHA CSI		0.5		96		200		8		CLR	IMP 225-36-2 59 IT 225-22 59
Dimethyltin dichloride		NIOSH 5526		0.1 mg/m³		60	60	250	1000	4	60	GC-FPD	ST 226-30-16 35
Dinitolmide		OSHA CSI				240		1000		4		HPLC	F/CST 225-706 79 C/HLD 225-1 87
Dinitro-o-cresol		OSHA CSI		0.2 mg/m³		180		1500		2		HPLC-UV	F/CST 225-3-01 77 IT 225-22 59 IMP 225-36-1 59
4,6-Dinitro-o-sec-butyl phenol		OSHA CSI				24		50		8		HPLC-UV	ST 226-95 37
Dinitrobenzene (all isomers)		OSHA CSI		1 mg/m³		60		1000		1		HPLC-UV	ST 226-30-16 35
2-(2,4-Dinitrophenoxy)ethanol		OSHA CSI				10		20(50)		8(3.3)		HPLC-UV	ST 226-10 35
Dinitrotoluene (DNT)		OSHA 44		1.5 mg/m³		60		1000		1		GC-TEA	ST 226-56 36
n-Dioctyl phthalate (DNOP)		OSHA 104				240		1000		4		GC-FID	ST 226-56 36
Dioxane (diethylene dioxide)	●	NIOSH 1602		1 (30 min)		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Dioxane (diethylene dioxide)	●	OSHA 07	1114	100		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Dioxathion (Delnav)		OSHA CSI				480		1000		8		GC-FPD	ST 226-30-16 35
Dioxins (including PHDDs, PCDDs, PBDDs) *(see Environmental Sampling Guide)*		EPA TO-9A											
Diphenyl		NIOSH 2530		0.2		30		100		5		GC-FID	ST 226-35-01 35
Diphenyl ether		OSHA PV2022		0.2		20		200		100 min		GC-FID	ST 226-95 37

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Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
p,p-Diphenyl methane diisocyanate (MDI) *(see methylene bisphenyl isocyanate)*		OSHA 47											
2-Diphenylacetyl-1,3-indandione		OSHA CSI				480		2000		4		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Diphenylamine		OSHA 78	1229			100		1000		100 min		HPLC-UV	CF/CST 225-9004 61 C/HLD 225-1 87
5,5-Diphenylhydantoin		OSHA CSI				60		1000		1		HPLC-UV	FLT C/HLD 225-7 ‡ 225-1 79 87 CST 225-3LF 86
Diphenylmethane-4,4'-diisocyanate (4,4-methylene bisphenyl isocyanate) (isocyanates)		NIOSH 5521	1001	50 µg/m³	200 µg/m³ (10 min) C	480	10	1000	1000	8	10	HPLC-ELCHM & HPLC-UV	IMP 225-36-1 59 IT 225-22 59
Dipropyl disulfide		OSHA PV2086				10		20(50)		8(3.3)		GC-FPD	ST 226-110 37
Dipropyl ketone		OSHA CSI				10		20		8		GC-FID	ST NA SKC
Dipropylene glycol methyl ether	●	OSHA 07	1113	100		10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
Dipropylene glycol methyl ether	●	OSHA 101		100		10		100		100 min		GC-FID	ST 226-01 35
Dipropylene glycol methyl ether (glycol ethers)	●	NIOSH 2554				3-25		100-200		varies		GC-FID	ST 226-81A 36
Dipropylene glycol monomethyl ether (glycol ethers)	●	NIOSH 2554				3-25		100-200		varies		GC-FID	ST 226-81A 36
Diquat		OSHA CSI				120		1000		2		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Direct black 38		OSHA CSI				100		1000		100 min		HPLC	F/CST 225-706 79 C/HLD 225-1 87
Direct black 38 (dyes, benzidine)		NIOSH 5013		LFC		480		1000		8		HPLC	FLT C/HLD 225-17A 225-1 74 87 CST 225-3LF 86
Direct blue		OSHA CSI				60		1000		1		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Direct blue 2		OSHA CSI				100		1000		100 min		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Direct blue 6		OSHA CSI				100		1000		100 min		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Direct blue 6 (dyes, benzidine)		NIOSH 5013		LFC		480		1000		8		HPLC	FLT C/HLD 225-17A 225-1 74 87 CST 225-3LF 86
Direct blue 8 (dyes, benzidine)		NIOSH 5013		LFC		480		1000		8		HPLC	FLT C/HLD 225-17A 225-1 74 87 CST 225-3LF 86
Direct blue 98		OSHA CSI				180		1000		3		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Direct brown 31		OSHA CSI				180		1000		3		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Direct brown 95		OSHA CSI				100		1000		100 min		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Direct brown 95 (dyes, benzidine)		NIOSH 5013		LFC		480		1000		8		HPLC	FLT C/HLD 225-17A 225-1 74 87 CST 225-3LF 86
Direct red 2		OSHA CSI				120		1000		2		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Direct red 2 (dyes, benzidine)		NIOSH 5013		LFC		480		1000		8		HPLC	FLT C/HLD 225-17A 225-1 74 87 CST 225-3LF 86
Direct red 28 (dyes, benzidine)		NIOSH 5013		LFC		480		1000		8		HPLC	FLT C/HLD 225-17A 225-1 74 87 CST 225-3LF 86
Direct red 81		OSHA CSI				100		1000		100		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Disperse yellow 3		OSHA CSI				100		1000		100 min		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Disulfiram (tetraethylthiuram disulfide)		OSHA CSI				120		1000		2		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Disulfoton		OSHA PV2105				480		1000		8		GC-FPD	ST 226-30-16 35
Disulfoton (organophosphorus pesticides)		NIOSH 5600		0.1 mg/m³		240		1000		4		GC-FPD	ST 226-58 36
Disyston		OSHA CSI				480		1000		8		GC-FPD	ST 226-30-16 35
2,2'-Dithiobis(benzothiazole)		OSHA CSI				480		2000		4		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Diuron		ASTM D 4861				240-7200		1000-5000		4-24		HPLC-UV	PUF 226-92 42
Diuron (organonitrogen pesticides)		NIOSH 5601		10 mg/m³		240		1000		4		HPLC-UV	ST 226-58 or ST 226-30-16 35
Divinyl benzene		OSHA 89				12		50		4		GC-FID	ST 226-73 36
Divinyl sulfide		OSHA CSI				2.5		20		2		GC	ST 226-01 35
DMP *(see dimethyl phthalate)*		OSHA 104											
DNOP *(see di-n-octyl phthalate)*		OSHA 104											
DNT (dinitrotoluene)		OSHA 44		1.5 mg/m³		60		1000		1		GC-TEA	ST 226-56 36
Dodecyl alcohol (lauryl alcohol)	●	OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Dodine		OSHA CSI				240		1000		2		HPLC-UV	ST 226-30 35
Dursban (chlorpyrifos)(organophosphorus pesticides)		NIOSH 5600		0.2 mg/m³	0.6 mg/m³	240		1000		4		GC-FPD	ST 226-58 36
Dust, inorganic						15-150		15000		1-10 min		varies	STC 225-9820 81
Dust, respirable (in workplace atmospheres)		ASTM D 4532	1418			varies		2500		varies		GR	FLT CYC 225-8-01 225-01-02 73 95 C/HLD CST 225-1 225-3LF 87 86
Dust, respirable nuisance		OSHA CSI		5.0 mg/m³		varies		varies		varies		GR	FLT CYC 225-8-01 225-105 73 94 C/HLD CST 225-1 225-3LF 87 86
Dust, respirable nuisance (particulates)		NIOSH 0600	1038			375		2500		2.5		GR	FLT CYC 225-8-01 225-01-02 73 95 C/HLD CST 225-1 225-3LF 87 86
Dust, total nuisance		OSHA CSI		15 mg/m³		720		1500		8		GR	FLT CST 225-8-01 225-2LF 73 86 C/HLD 225-1 87
Dust, total nuisance (particulates)		NIOSH 0500	1035			120		2000		1		GR	FLT CST 225-8-01 225-2LF 73 86 C/HLD 225-1 87
Dust, total, particulates not otherwise regulated		NIOSH 0500	1035			120		2000		1		GR	FLT CST 225-8-01 225-2LF 73 86 C/HLD 225-1 87
Dyes, benzidine, o-tolidine, o-dianisidine		NIOSH 5013		LFC		480		1000		8		HPLC-UV	FLT C/HLD 225-17A 225-1 74 87 CST 225-3LF 86
Dyfonate		OSHA CSI				480		1000		8		GC-FPD	ST 226-30-16 35
Elemental carbon (diesel exhaust)		MSHA				varies		varies		varies		EGA-TOS	DPM 225-317 84 CYC 225-105 85
Elemental carbon (diesel exhaust)		NIOSH 5040				varies		varies		varies		TOA-FID	F/CST C/HLD 225-401 225-1 79 87 CYC 225-100 84
Elements by ICP Aqua Regia ashing *(see specific element)*		NIOSH 7301 ¥		varies		varies		1000-4000		varies		ICP-AES	F/CST C/HLD 225-3-01 225-1 or 87 F/CST 225-803 73
Elements by ICP HNO_3 digestion *(see specific element)*		NIOSH 7303		varies		varies		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Elements by ICP $HNO_3/HClO_4$ ashing *(see specific element)*		NIOSH 7300	1455	varies		varies		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Elements on wipes *(see specific element)*		NIOSH 9102				wipe						ICP-AES	W 225-2414 124 TMP 225-2415 124 TMP 225-2403 or

Agency standards for OSHA listings represent the OSHA PELs reported in the 29 CFR 1910.1000 Part 1910, Section 1000.

References and abbreviations are found on pages 196-197.

Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Elements qualitative		OSHA ID 204				480		2000		8		XRF	F/CST 225-3-01 77 C/HLD 225-1 87
Emery (corundum) (particulates, respirable)		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-01-02 95 CST 225-3LF 86
Emery (corundum) (particulates, total)		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Emery (respirable dust)		OSHA CSI		5 mg/m³		varies		varies		varies		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-105 94 CST 225-3LF 86
Emery (total dust)		OSHA CSI		15 mg/m³		960		2000		8		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-3LF 86
Endosulfan (Thiodan)		OSHA PV2023				60		1000		1		GC-ECD	ST 226-30-16 35
Endotoxins (bacteria in air)		NON 48				62.5-375		12500 +		5-30		varies	BS 225-9595 105 VT ◊ 225-9598A 105
Endrin		NIOSH 5519		0.1 mg/m³		240		1000		4		GC-ECD	CST 225-2LF 86 FLT 225-5 76 SCN 225-26 87 ST 226-104 37 C/HLD 225-1 87
Enflurane (ethrane)	●	OSHA 103	1348			12		50		4		GC-FID	ST 226-81A 36
Enflurane (ethrane)	●	OSHA 29				10		20		8		GC-FID	ST 226-01 35
Environmental tobacco smoke (nicotine & 3-ethenylpyridine)		NON 49				90-720		1500		1-8		GC-NSD	ST 226-170 38
Environmental tobacco smoke (respirable particles)		ASTM D 5955	1419			varies		varies		varies		GR & HPLC-UV & HPLC-FD	FLT 225-2705 74 C/HLD 225-1 87 CYC 225-01-02 95 CST 225-3LF 86
Environmental tobacco smoke (solanesol, respirable particles)		ASTM D 6271				150-3600		2500		1-24		HPLC-UV	FLT 225-2705 74 CST 225-3LF 86 CYC 225-01-02 95 C/HLD 225-1 87
Epichlorohydrin	●	NIOSH 1010		LFC		10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
Epichlorohydrin	●	OSHA 07	1112	5		20		100		3.3		GC-FID	ST 226-01 35
Epicoccum species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Epicoccum species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
EPN		NIOSH 5012		0.5 mg/m³		480		1000		8		GC-FPD	F/CST 225-709 79 C/HLD 225-1 87
EPN		OSHA CSI		0.5 mg/m³		480		1000		8		GC-FPD	ST 226-30-16 35
1,2-Epoxyethylbenzene		OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-35 35
1,2-Epoxypropane *(see propylene oxide)*	●												
2,4,D-Esters		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
Esters I *(see specific compounds)*		NIOSH 1450		varies		1-10		varies		varies		GC-FID	ST 226-01 35
Estradiol		OSHA PV2001				240		1000		4		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Estriol		OSHA PV2001				60		1000		1		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Estrone		OSHA PV2001				60		1000		1		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
1,2-Ethanediol (ethylene glycol) (glycols)		NIOSH 5523	1401			24		100		4		GC-FID	ST 226-57 36
1,2-Ethanediol dinitrate		OSHA 43			0.2 (C)		15		1000		15	HPLC-TEA	ST 226-35-03 36
2-(2-methoxyethoxy)Ethanol		OSHA CSI				6		100		1		GC-FID	ST 226-01 35
Ethanolamine		OSHA PV2111		3		10	1.5	100	100	100 min	15	HPLC-UV	ST 226-30-18 35
3-Ethenylpyridine		NON 49				90-720		1500		1-8		GC-NSD	ST 226-170 38
3-Ethenylpyridine & nicotine		ASTM D 5075	1427			90-2160		1500		1-24		GC-NPD	ST 226-93 37
Ethion (nialate)		OSHA CSI				480		1000		8		GC-FPD	ST 226-30-16 35
Ethion (organophosphorus pesticides)		NIOSH 5600		0.4 mg/m³		240		1000		4		GC-FPD	ST 226-58 36
Ethoprop (organophosphorus pesticides)		NIOSH 5600				240		1000		4		GC-FPD	ST 226-58 36
1-Ethoxy-2-propanol		OSHA CSI				48		100		8		GC-FID	ST 226-01 35
2-Ethoxyethanol (alcohols IV)	●	NIOSH 1403	1273	0.5 (skin)		1-6		10-50		varies		GC-FID	ST 226-01 35
2-Ethoxyethanol (CELLOSOLVE solvent)	●	OSHA 79	1277	200		48	15	100	1000	8	15	GC-FID	ST 226-01 35
2-Ethoxyethanol (CELLOSOLVE solvent) (alcohols IV)	●	NIOSH 1403	1273	0.5 (skin)		1-6		10-50		varies		GC-FID	ST 226-01 35
2-Ethoxyethyl acetate (CELLOSOLVE acetate)	●	OSHA 79	1277	100		48	15	100	1000	8	15	GC-FID	ST 226-01 35
2-Ethoxyethyl acetate (esters I)	●	NIOSH 1450		0.5 (skin)		1-10		10-200		varies		GC-FID	ST 226-01 35
Ethrane (enflurane)	●	OSHA 29				10		100		1.6		GC-FID	ST 226-01 35
Ethyl 2-cyanoacrylate		OSHA 55				12		100		2		HPLC-UV	ST 226-98 37
Ethyl acetate	●	NIOSH 1457		400		10		20		8		GC-FID	ST 226-01 35
Ethyl acetate	●	OSHA 07	1111	400		5		20		4		GC-FID	ST 226-01 35
Ethyl acrylate	●	NON 54		5	15	10	3	20	200	8	15	GC-FID	ST 226-81A 36
Ethyl acrylate	●	OSHA 92		25		12	0.75	50	50	4	15	GC-FID	ST 226-73 36
Ethyl acrylate (esters I)	●	NIOSH 1450		4 (LOQ)		1-10		10-200		varies		GC-FID	ST 226-01 35
Ethyl alcohol (ethanol)	●	OSHA 07	1109	1000		1		50		20 min		GC-FID	ST 226-01 35
Ethyl alcohol (ethanol)	●	OSHA 100	1283	1000		12		50		4		GC-FID	ST 226-82 37
Ethyl alcohol (ethanol) (alcohols I)	●	NIOSH 1400		1000		1		50		20 min		GC-FID	ST 226-01 35
Ethyl amyl ketone	●	OSHA 07	1158	25		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Ethyl benzene	●	ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
Ethyl benzene	●	OSHA 07	1108	100		10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
Ethyl benzene	●	OSHA 1002	1746	100		12		50		4		GC-FID	ST 226-01 35
Ethyl benzene		OSHA 1002	1746	100				13.83		8		GC-FID	PS 575-002 64
Ethyl benzene (hydrocarbons, aromatic)	●	NIOSH 1501	1053	100	125	1-24	1-24	10-200	10-200	varies	varies	GC-FID	ST 226-01 35
Ethyl bromide (bromoethane)	●	NIOSH 1011				4		20		3.3		GC-FID	ST 226-01 35
Ethyl bromide (bromoethane)	●	OSHA 07	1107	200		5	3	20	200	4	15	GC-FID	ST 226-01 35
Ethyl butyl ketone (3-heptanone)	●	OSHA 07	1106	50		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Ethyl butyl ketone (3-heptanone) (ketones II)		NIOSH 2553		50		1-25		10-200		varies		GC-FID	ST NA SKC
Ethyl butyl ketone (3-heptanone) (ketones II)	●	NIOSH 1301		50		24		200		2		GC-FID	ST 226-01 35
Ethyl CELLOSOLVE solvent (2-ethoxyethanol)	●											GC-FID	PS 575-001 64
Ethyl chloride		ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
Ethyl chloride		NIOSH 2519				3		50		1		GC-FID	ST 226-25 35
Ethyl chloride		OSHA 07		1000		3		50		1		GC-FID	ST 226-01 35

Agency standards for OSHA listings represent the OSHA PELs reported in the 29 CFR 1910.1000 Part 1910, Section 1000.

References and abbreviations are found on pages 196-197.

Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Ethyl ether (diethyl ether)	●	OSHA 07	1105	400		3	3	20	200	2.5	15	GC-FID	ST 226-01 35
Ethyl ether (ethyl ether)	●	NIOSH 1610				0.25-3		10-200		varies		GC-FID	ST 226-01 35
Ethyl formate	●	NIOSH 1452		100		10		20		8		GC-FID	ST 226-01 35
Ethyl formate	●	OSHA 07	1104	100		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Ethyl lactate		OSHA PV2081				10		200		50 min		GC-FID	ST 226-01 35
Ethyl mercaptan		OSHA CSI			10 (C)		120		1000		120	GC-FPD	CF/CST 225-9007 61 C/HLD 225-1 87
Ethyl mercaptan (mercaptans)		NIOSH 2542	1330		0.5 (15 min)	48	12	100	200	8	60	GC-FPD	CF/CST 225-9007 61 C/HLD 225-1 87
Ethyl methacrylate	●	NIOSH 2537				1-8		10-50		varies		GC-FID	ST 226-30-06 35
Ethyl methacrylate	●	OSHA PV2100				10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Ethyl O-(p-nitrophenyl) phenylphosphonothionate (EPN)		NIOSH 5012		0.5 mg/m³		480		1000		8		GC-FPD	F/CST 225-709 79 C/HLD 225-1 87
Ethyl parathion		ASTM D 4861				240-7200		1000-5000		4-24		GC-NPD	PUF 226-92 42
Ethyl propionate	●	OSHA CSI				10		20(50)		8(3.3)		GC	ST 226-01 35
Ethyl silicate		OSHA CSI		100		9		50		3		GC-FID	ST 226-30-04 35
Ethyl tert-butyl ether (tert-butyl ethyl ether)	●											GC-FID	PS 575-001 64
Ethyl vinyl benzene		OSHA 89				12		50		4		GC-FID	ST 226-73 36
Ethyl-3-ethoxypropionate		OSHA PV2025				10		100		100 min		GC-FID	ST 226-01 35
Ethylamine		OSHA 36		10		10		200		50 min		HPLC-UV	ST 226-96 37
Ethylene	●	OSHA CSI										DET TB	DT 800-28051 or DT 810-172 or DT 800-01331 or DT 810-172L
Ethylene chlorohydrin		NIOSH 2513			1	10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-81A 36
Ethylene chlorohydrin		OSHA 07	1159	5		20		40		8		GC-FID	ST 226-81A 36
Ethylene dibromide (1,2-dibromoethane)	●	NIOSH 1008		0.045	0.13(15min)	10	3	20(50)	200	8(3.3)	15	GC-ECD	ST 226-01 35
Ethylene dibromide (1,2-dibromoethane)	●	OSHA 02	1072	20	30	10	1	20(50)	200	8(3.3)	5	GC-ECD	ST 226-01 35
Ethylene dichloride (1,2-dichloroethane)	●	OSHA 03	1063	50	100	10	3	200	200	1	15	GC-ECD	ST 226-01GWS 35
Ethylene dichloride (1,2-dichloroethane) (hydrocarbons, halogenated)	●	NIOSH 1003		1	2	3	3	10-200	10-200	varies	varies	GC-FID	ST 226-01 35
Ethylene glycol (glycols)		NIOSH 5523	1401			60		1000		1		GC-FID	ST 226-57 36
Ethylene glycol dinitrate		OSHA 43			0.2 (C)		15		1000		15	HPLC-TEA	ST 226-35-03 36
Ethylene glycol dinitrate (nitroglycerine)		NIOSH 2507			0.1 mg/m³		15		1000		15	GC-ECD	ST 226-35-03 36
Ethylene glycol isopropyl ether (isopropyl CELLOSOLVE solvent)		OSHA CSI				9		100		1.5		GC-FID	ST 226-01 35
Ethylene glycol monohexyl ether	●	OSHA CSI				10		200		50 min		GC-FID	ST 226-01 35
Ethylene oxide	●	ASTM D 4413				6	3	100	200	1	15	GC-FID	ST 226-16 or ST 226-36 36
Ethylene oxide	●	ASTM D 5578				9.6	1.5	20	100	8	15	GC-ECD	ST 226-178 38
Ethylene oxide	●	NIOSH 1614		0.1	5 (10 min)	24	1.5	100	150	4	10	GC-ECD	ST 226-178 38
Ethylene oxide	●	OSHA 1010	1751	1	5.0 EL	12	0.75	50	50	4	15	GC-ECD	ST 226-178 38
Ethylene oxide (by portable GC)		NIOSH 3702	1031	0.1	5 (10 min)	varies	varies	20-4000	varies	varies	varies	P GC-PID	SB 232 Series 50
Ethylene oxide (Qazi-Ketcham)		NON 14				10		20(50)		8(3.3)		GC	ST 226-36 36
Ethylene thiourea		NIOSH 5011		LFC		480		2000		4		VAS	F/CST 225-802 73 C/HLD 225-1 87
Ethylene thiourea		OSHA 95				480		2000		4		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Ethylenediamine		NIOSH 2540		10		10		100		1.7		HPLC-UV	ST 226-30-18 35
Ethylenediamine		OSHA 60	1287	10		10		100		100 min		HPLC-UV	ST 226-30-18 35
Ethylenimine		NIOSH 3514				48		200		4		HPLC-UV	IMP 225-36-2 59 IT 225-22 59
2-Ethylhexanol	●	OSHA CSI				48		200		4		GC-FID	ST 226-01 35
Ethylhexyl acetate	●	OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-01 35
2-Ethylhexyl acrylate		OSHA PV2026				12		100		2		GC-FID	ST 226-73 36
di-2-Ethylhexyl phthalate (DEHP)		OSHA 104		5 mg/m³		240		1000		4		GC-FID	ST 226-56 36
N-Ethylmorpholine		OSHA CSI		20		10		20(50)		8(3.3)		GC-FID	ST 226-10 35
ETS *(see environmental tobacco smoke)*		NON 49											
Exserohilum species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Exserohilum species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Fenamiphos		OSHA CSI				480		1000		8		GC-FPD	ST 226-30-16 35
Fenamiphos (organophosphorus pesticides)		NIOSH 5600		0.1 mg/m³		240		1000		4		GC-FPD	ST 226-58 36
Fenarimol		OSHA CSI				30		1000		30 min		HPLC-UV	ST 226-30-16 35
Fensulfothion (Dansanit)		OSHA CSI				480		1000		8		GC-FPD	ST 226-30-16 35
Fenthion		OSHA CSI				480		1000		8		GC-FPD	ST 226-30-16 35
Fenvalerate		ASTM D 4861				240-7200		1000-5000		4-24		HPLC-UV	PUF 226-92 42
Ferbam		OSHA CSI		15 mg/m³		480		1000		8		HPLC-UV	ST 226-30-16 35
Ferric chloride *(see iron salts, soluble as Fe)*		OSHA ID 121											
Ferrovanadium dust		OSHA ID 125G	1218	1 mg/m³		480	30	2000	2000	4	15	ICP-AES	F/CST 225-3-01 or F/CST 225-3100 77 C/HLD 225-1 87
Fibers (bioaerosols)						15-150		15000		1-10 min		varies	STC 225-9820 81
Fibers *(see specific compounds)*													
Fibrous glass (particulates, respirable)		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-01-02 95 CST 225-3LF 86
Fibrous glass (particulates, total)		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Fibrous glass dust		OSHA CSI		15 mg/m³		960		2000		8		GR	F/CST 225-8204 73 C/HLD 225-1 87
Flax dust *(see dust, total & respirable nuisance)*		OSHA CSI											
Fluoboric acid		OSHA CSI				120		1000		2		ISE	IMP 225-36-2 59 IT 225-22 59
Fluometuron		ASTM D 4861				240-7200		1000-5000		4-24		HPLC-UV	PUF 226-92 42
Fluoranthene		OSHA CSI				960		2000		8		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Fluoranthene (polynuclear aromatic hydrocarbons by GC-MS)		ASTM D 6209				350 m³ (max)		225 L/min		1-24		GC-MS	PUF 226-131 43 FLT 225-1821 79
Fluoranthene (polynuclear aromatic hydrocarbons by GC)		NIOSH 5515				480		2000		4		GC-FID	F/CST 225-1713 74 ST 226-30-04 35 C/HLD 225-1 87

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References and abbreviations are found on pages 196-197.

Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Fluoranthene (polynuclear aromatic hydrocarbons by HPLC)		NIOSH 5506				480		2000		4		HPLC-FD	F/CST 225-1713 74 ST 226-30-04 35 C/HLD 225-1 87
Fluorene		OSHA CSI				960		2000		8		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Fluorene (polynuclear aromatic hydrocarbons by GC-MS)		ASTM D 6209				350 m^3 (max)		225 L/min		1-24		GC-MS	PUF 226-131 43 FLT 225-1821 79
Fluorene (polynuclear aromatic hydrocarbons by GC)		NIOSH 5515				480		2000		4		GC-FID	F/CST 225-1713 74 ST 226-30-04 35 C/HLD 225-1 87
Fluorene (polynuclear aromatic hydrocarbons by HPLC)		NIOSH 5506				480		2000		4		HPLC-UV	F/CST 225-1713 74 ST 226-30-04 35 C/HLD 225-1 87
Fluorides		ASTM D 4765	1421			varies		2000		varies		ISE	CF/CST 225-9001 61 C/HLD 225-1 87
Fluorides (aerosol & gas by ISE)		NIOSH 7902	1226	2.5 mg/m^3	6 (HF)	480	22.5	1000	1500	8	15	ISE	CF/CST 225-9001 61 C/HLD 225-1 87
Fluorides (as F)		OSHA ID 110	1227	2.5 mg/m^3		90	22.5	1500	1500	1	15	ISE	CF/CST 225-9001 61 C/HLD 225-1 87
Fluorine		OSHA CSI		0.1		480		1000		8		ISE	IMP 225-36-2 59 IT 225-22 59
Fluorotrichloromethane (trichlorofluoromethane)		NIOSH 1006			1000		5		20		240	GC-FID	ST 226-09 35
5-Fluorouracil		OSHA CSI				180		1000		3		HPLC-UV	ST 226-30-16 35
Folpet		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
Fonofos (dyfonate)		OSHA PV2027				480		1000		8		GC-FPD	ST 226-30-16 35
Fonofos (organophosphorus pesticides)		NIOSH 5600		0.1 mg/m^3		240		1000		4		GC-FPD	ST 226-58 36
Formaldehyde	●	ASTM D 5197	1442			varies		500-1200		5 min-24 hrs		HPLC-UV	ST 226-120 ○ or ST 226-119 37
Formaldehyde	●	NIOSH 2016	1761	0.016	0.1 (C)	1-<15	1-<15	30-500	30-500	varies	varies	HPLC-UV	ST 226-119 ♠ 37
Formaldehyde	●	NIOSH 2541	1015	0.016	0.1 (C)	24	1	100	100	4	10	GC-FID	ST 226-118 37
Formaldehyde	●	NIOSH 3500		0.016	0.1	96	15	200	1000	8	15	VAS	IMP 225-36-1 59 IT 225-22 59 FLT 225-1709 74 CST 225-2LF 86 SCN 225-26 87
Formaldehyde	●	OSHA 1007		0.75	2	13.8	0.43	28.6	28.6	8	15	HPLC-UV	PS 500-100 67
Formaldehyde	●	OSHA 52	1020	0.75	2	24	3	100	200	4	15	GC-NPD	ST 226-117 or ST 226-54 36
Formaldehyde (aldehydes, screening)	●	NIOSH 2539		0.016	0.1	5		20		4		GC-FID & GC-MS	ST 226-118 37
Formaldehyde *(see Environmental Sampling Guide)*		EPA IP-11A											
Formaldehyde *(see Environmental Sampling Guide)*		EPA IP-6A											
Formaldehyde *(see Environmental Sampling Guide)*		EPA IP-6C											
Formaldehyde on dust (textile or wood)		NIOSH 5700		0.016	0.1	240		2000		4		HPLC-UV	IOM 225-70A 92 FLT 225-5-25 73
Formamide		OSHA CSI				10	1.5	100	100	100 min		GC-NPD	ST 226-10 35
Formetanate (organonitrogen pesticides)		NIOSH 5601				240		1000		4		HPLC-UV	ST 226-58 or ST 226-30-16 35
Formic acid	●	NIOSH 2011		5		24		200		2		IC-ECN	FLT 225-2708 74 CST 225-3-25LF 86 ST 226-10-03 35 C/HLD 225-1 87
Formic acid	●	OSHA ID 186SG		5		48		100		8		IC	ST 226-09 35
Freon 11		ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
Freon 113		OSHA 113		1000		1		50		20 min		GC-FID	ST NA SKC
Freon 113 (1,1,2-Trichloro-1,2,2-trifluoroethane)		ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
Freon 114		ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
Freon 12		ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
Freon 123		NON 50				9		50		3		GC-FID	ST 226-09 35
Freon 141b		OSHA 113		1000		1		50		20 min		GC-FID	ST NA SKC
Fumarin		OSHA CSI				180		1000		3		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Fungi		NIOSH 0800				varies		28,300		varies		varies	BI 225-9611 103
Fungi (in air)						15-150		15000		1-10 min		varies	STC 225-9820 81
Fungi (in air) (BioSampler method)		NON 48				62.5-375		12500 +		5-30		varies	BS 225-9595 105 VT 225-9598A 105
Furans (including PHDFs, PCDFs, PBDFs) *(see Environmental Sampling Guide)*		EPA TO-9A											
Furfural	●	NIOSH 2529				5		20		4		GC-FID	ST 226-118 37
Furfural	●	OSHA 72		5		180		1000		3		GC-FID	ST 226-81A 36
Furfural (aldehydes, screening)	●	NIOSH 2539				5		20		4		GC-FID & GC-MS	ST 226-118 37
Furfuryl alcohol		NIOSH 2505		10	15	5		20		4		GC-FID	ST 226-115 37
Fusarium species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Fusarium species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Gallium		OSHA CSI				960		2000		8		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Gallium (elements by ICP HNO_3 digestion)		NIOSH 7303				1-3300		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Gasoline		OSHA PV2028				10	1.5	20(50)	100	8(3.3)	15	GC-FID	ST 226-01 35
Gentian violet		OSHA CSI				180		1000		3		HPLC-UV	FLT 225-7 ‡ 79 CST 225-2LF 86 C/HLD 225-1 87
Germanium oxide		OSHA CSI				960		2000		8		AA-GF	F/CST 225-3-01 77 C/HLD 225-1 87
Glass, fibrous *(see asbestos fibers)*		NIOSH 7400											
Glass, fibrous dust		OSHA CSI				960		2000		8		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Gliocladium species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Gliocladium species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Glutaraldehyde	●	NIOSH 2532	1346		0.2		3		200		15	HPLC-UV	ST 226-119 37
Glutaraldehyde	●	NON 43				30	15	250	1000	2	15	GC-FID	ST 226-10 35
Glutaraldehyde	●	OSHA 64	1241				15		1000		15	HPLC-UV	CF/CST 225-9003 61 C/HLD 225-1 87
Glycerin mist (particulates, respirable)		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-01-02 95 CST 225-3LF 86
Glycerin mist (respirable)		OSHA CSI		5 mg/m^3		varies		varies		varies		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-105 94 CST 225-3LF 86
Glycerin mist (total dust)		OSHA CSI		15 mg/m^3		96		2000		8		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-3LF 86
Glycidol (2,3-epoxy-1-propanol)	●	NIOSH 1608		25		10		20(50)		8(3.3)		GC-FID	ST 226-01 35

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Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Glycidol (2,3-epoxy-1-propanol)	●	OSHA 07	1157	50		48		100(200)		8(4)		GC-FID	ST 226-01 35
Glycol chlorohydrin *(see ethylene chlorohydrin)*													
Glycol ethers		NIOSH 2554				3-25		100-200		varies		GC-FID	ST 226-81A 36
Glycols		NIOSH 5523	1402			60		1000		1		GC-FID	ST 226-57 36
Glyphosate		OSHA PV2067				100		1000		100 min		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Gold		OSHA ID 121				960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Gold (elements by ICP HNO_3 digestion)		NIOSH 7303				1-3300		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Grain dust (oats, wheat, barley)		OSHA CSI		10 mg/m³		960		2000		8		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-3LF 86
Graphite (natural) (respirable dust)		OSHA ID 142		15 mppcf		varies		varies		varies		GR & XRD	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-105 94 CST 225-3LF 86
Graphite (synthetic) (particulates, respirable)		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-01-02 95 CST 225-3LF 86
Graphite (synthetic) (particulates, total)		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Graphite (synthetic) (respirable dust)		OSHA CSI		5 mg/m³		varies		varies		varies		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-105 85 CST 225-3LF 86
Graphite (synthetic) (total dust)		OSHA CSI		15 mg/m³		960		2000		8		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Graphium species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Graphium species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Grunerite fibers *(see asbestos)*		OSHA ID 160											
Gypsum (particulates, respirable)		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-01-02 95 CST 225-3LF 86
Gypsum (particulates, total)		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Hafnium		OSHA ID 121		0.5 mg/m³		960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Halothane		OSHA 103	1347			12		50		4		GC-FID	ST 226-81A 36
Halothane		OSHA 29				9		100		1.5		GC-FID	ST 226-01 35
Haloxon		OSHA CSI										W	W 225-2401A 124
HDI *(see hexamethylene diisocyanate)*													
Heptachlor		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
Heptachlor		OSHA PV2029		0.5 mg/m³		60		1000		1		GC-ECD	ST 226-30-16 35
Heptachlor (non-occupational exposure)		ASTM D 4947	1417			240-7200	250	1000-5000		4-24		GC-ECD	PUF 226-92 42
Heptachlor epoxide		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
Heptanal (aldehydes, screening)		NIOSH 2539				5		20		4		GC-FID & GC-MS	ST 226-118 37
n-Heptane	●	OSHA 07	1156	500		5	3	20	200	4	15	GC-FID	ST 226-01 35
4-Heptanone (dipropyl ketone)	●												PS 575-002 64
3-Heptanone (ethyl butyl ketone) (ketones II)		NIOSH 2553		50		1-25		10-200		varies		GC-FID	ST NA SKC
2-Heptanone (methyl n-amyl ketone) (ketones II)		NIOSH 2553		100		1-25		10-200		varies		GC-FID	ST NA SKC
1-Heptene	●	OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Hexachloro-1,3-cyclopentadiene		NIOSH 2518		0.01		24		50		8		GC-ECD	ST 226-116 37
Hexachlorobenzene		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
Hexachlorobenzene		OSHA CSI				480		2000		4		GC-ECD	F/CST 225-706 79 C/HLD 225-1 87
Hexachlorobutadiene		NIOSH 2543		0.02		48		100		8		GC-ECD	ST 226-30-04 35
Hexachlorocyclopentadiene		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-124 42
Hexachlorocyclopentadiene (hexachloro-1,3-cyclopentadiene)		NIOSH 2518		0.01		48		100		8		GC-ECD	ST 226-116 37
Hexachloroethane	●	OSHA 07	1155	1		30		100		5		GC-FID	ST 226-01 35
Hexachloroethane (hydrocarbons, halogenated)	●	NIOSH 1003		1		10		10-200		varies		GC-FID	ST 226-01 35
Hexachloronaphthalene		OSHA CSI		0.2 mg/m³		30		1000		30 min		GC-ECD	F/CST 225-3-01 77 C/HLD 225-1 87
Hexamethylene diisocyanate		NIOSH 5522		35 µg/m³	140 µg/m³	360	20	1000	2000	6	10	HPLC-FD	IMP 225-36-1 59 IT 225-22 59
1,6-Hexamethylene diisocyanate		OSHA 42	1458			15		1000		15 min		HPLC-UV or HPLC-FD	CF/CST 225-9002 or CF/CST 225-9013 61 C/HLD 225-1 87
Hexamethylene diisocyanate (gaseous)		ASTM D 6562				15		1000		15 min		HPLC-UV or HPLC-FD	CF/CST 225-9023 or CF/CST 225-9022 61 C/HLD 225-1 87
Hexamethylene diisocyanate (HDI) (isocyanates)		OR-OSHA 1010		0.02	0.02	45	5	1000	1000	45 min	5	HPLC	IMP 225-36-1 59 IT 225-22 59 CF/CST 225-9029 61
1,6-Hexamethylene diisocyanate (isocyanates, total)		NIOSH 5525		35 µg/m³	140 µg/m³ (10 min) (C)	1-500		1000-2000		varies		HPLC-UV	FLT 225-7 ‡ 79 CST 225-4 86 SP 225-27 or IOM 225-76A 92 FLT 225-702 ‡ 79
Hexamethylene diisocyanate (isocyanates)		NIOSH 5521		35 µg/m³	140 µg/m³ (10 min) (C)	480	10	1000	1000	8	10	HPLC-ELCHM & HPLC-UV	IMP 225-36-1 59 IT 225-22 59
Hexamethylene diisocyanate (monomeric aerosol)		ASTM D 6561				15		1000		15 min		HPLC-UV	CF/CST 225-9023 ▼ or CF/CST 225-9022 61 C/HLD 225-1 87
Hexamethylene diisocyanate (monomeric gaseous)		ASTM D 6561				15		1000		15 min		HPLC-UV	CF/CST 225-9023 ▼ or CF/CST 225-9022 61 C/HLD 225-1 87
Hexamethylene diisocyanate (oligomeric aerosol)		ASTM D 6561				15		1000		15 min		HPLC-UV	CF/CST 225-9023 or CF/CST 225-9022 61 C/HLD 225-1 87
Hexamethylene diisocyanate biuret		OSHA PV2030				15		1000		15 min		HPLC-UV	FLT 225-7 ‡ 79 CST 225-3LF 86 C/HLD 225-1 87
Hexamethylene diisocyanate biuret (HDI-BT) (isocyanates)		OR-OSHA 1010		1.0 mg/m³	0.5 mg/m³	45	5	1000	1000	45 min	5	HPLC	IMP 225-36-1 59 IT 225-22 59 CF/CST 225-9029 61
Hexamethylene diisocyanate isocyanurate (HDI-IC) (isocyanates)		OR-OSHA 1010		1.0 mg/m³	0.5 mg/m³	45	5	1000	1000	45 min	5	HPLC	IMP 225-36-1 59 IT 225-22 59 CF/CST 225-9029 61
Hexamethylenediamine		OSHA CSI				12		100		2		HPLC-UV	ST 226-30-18 35
Hexamethylenetetramine		NON 52				15		1000		15 min		GC-NPD or GC-FID	ST 226-57 36

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Hexamethylenetetramine		OSHA CSI				15		1000		15 min		GC-NPD	F/CST 225-3-01 77 IMP 225-36-1 59 IT 225-22 59
Hexanal		ASTM D 5197				varies		500-1200		5 min-24 hrs		HPLC-UV	ST 226-120 ❍ or ST 226-119 37
Hexanal (aldehydes, screening)		NIOSH 2539				5		20		4		GC-FID & GC-MS	ST 226-118 37
n-Hexane	●	OSHA 07	1154	500		5		20		4		GC-FID	ST 226-01 35
Hexane (isomers other than n-hexane)		OSHA CSI				4	3	20	200	3.3	15	GC-FID	ST 226-01 35
1,6-Hexanediol		OSHA CSI				6		100		1		GC-FID	ST 226-09 35
Hexanediol diacrylate		NON 39				480		1000		8		GC-FID	ST 226-56 36
1,6-Hexanediol diacrylate		OSHA CSI				10		20(50)		8(3.3)		HPLC	ST 226-95 37
1,6-Hexanediol diacrylate		OSHA PV2133		1 mg/m³		48		200		4		GC-FID	ST 226-110 37
2-Hexanone (ketones I)		NIOSH 2555				1-10		10-200		varies		GC-FID	ST NA SKC
2-Hexanone (methyl butyl ketone)	●	OSHA 07	1153	100		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
2-Hexanone (methyl butyl ketone) (ketones I)	●	NIOSH 1300		1		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Hexavalent chromium		ASTM D 6832				varies		1000-5000		varies		IC	F/CST 225-802 or F/CST 225-1713 or F/CST 225-709 or F/CST 225-401 79
Hexavalent chromium		NIOSH 7600	1032	1 µg/m³ (10 hr)		240		1000		4		VAS	F/CST 225-802 73 C/HLD 225-1 87
Hexavalent chromium		NIOSH 7604	1032	1 µg/m³ (10 hr)		240		1000		4		IC-ECN	F/CST 225-802 73 C/HLD 225-1 87
Hexavalent chromium		NIOSH 7605		0.001 mg/m³ (10 hr)		1-400		1000-4000		varies		IC-PCD-UV	F/CST 225-802 73 C/HLD 225-1 87
Hexavalent chromium		NIOSH 7703		0.001 mg/m³ (10 hr)		10-1200		1000-4000		varies		P VAS	F/CST 225-802 73 C/HLD 225-1 87
Hexavalent chromium		OSHA ID 103		0.005 mg/m³ (C)		960	30	2000	2000	8	15	DPP	F/CST 225-802 73 C/HLD 225-1 87
Hexavalent chromium		OSHA W4001		0.005 mg/m³ (C)								IC-UV	FLT 225-8-01-1 or FLT 225-1822 79
Hexavalent chromium (CR(VI))		OSHA ID 215 (V2)	1439	0.005 mg/m³		960		2000		8		IC-UV	F/CST 225-802 Ω 73 C/HLD 225-1 87
Hexavalent chromium (in settled dust)		NIOSH 9101				bulk	bulk					CLR or VAS or IC	
Hexone		OSHA 1004		100				13.62		8		GC-FID	PS 575-002 64
Hexone		OSHA 1004		100		12		50		4		GC-FID	ST NA SKC
Hexone (ketones I)		NIOSH 2555		50		1-10		10-200		varies		GC-FID	ST NA SKC
Hexone (methyl isobutyl ketone)	●	OSHA 07		100		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Hexone (methyl isobutyl ketone) (ketones I)	●	NIOSH 1300		50	75	10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
n-Hexyl acetate	●	OSHA CSI				6		200		30 min		GC-FID	ST 226-01 35
sec-Hexyl acetate	●	OSHA 07	1152	50		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Hexyl alcohol	●	OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Hexyl carbitol		OSHA CSI				6		200		30 min		GC-FID	ST 226-01 35
Hexylene glycol	●	OSHA PV2101					3		200		15	GC-FID	ST 226-01 35
HMX		OSHA PV2032				480		1000		8		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
HydramethylNON		OSHA CSI				90		1000		1.5		HPLC-UV	F/CST 225-3-01 77 C/HLD 225-1 87
Hydrazine	●	NIOSH 3503		0.03 (120 min)		90		1000		1.5		VAS	IMP 225-36-2 59 IT 225-22 59
Hydrazine	●	NON 22				96		200		8		CLR	ST 226-42-02 36
Hydrazine	●	OSHA 108		1		240		1000		4		IC-UV	CF/CST 225-9012 61 C/HLD 225-1 87
Hydrazine	●	OSHA 20	1281	1		20		100		3.3		HPLC-UV	ST 226-42-02 36
Hydrazine (skin)												CI	PCH 769-3004 or W 769-1034 122
Hydrazine (surface)												CI	W 769-1024 122
Hydrazoic acid		NON 25					15		1000		15	HPLC-UV	ST 226-55 36
Hydrazoic acid		OSHA ID 211					5		1000		5	IC-UV	ST 226-55 36 FLT 225-8-01 73 CST 225-2LF 86 SPC 225-23 87 C/HLD 225-1 87
Hydrobromic acid (acids, inorganic)		NIOSH 7903	1016		3	48	4.5	200	300	4	15	IC	ST 226-10-03 35
Hydrocarbons BP 36 to 216 C *(see specific compounds)*		NIOSH 1500		varies		varies		varies		varies		GC-FID	ST 226-01 35
Hydrocarbons, aromatic *(see specific compounds)*		NIOSH 1501	1453	varies		varies		varies		varies		GC-FID	ST 226-01 35
Hydrocarbons, halogenated *(see specific compounds)*		NIOSH 1003	1454	varies		varies		varies		varies		GC-FID	ST 226-01 35
Hydrochloric acid	●												DT 800-33111
Hydrocyanic acid	●												DT 800-33221
Hydrofluoric acid (fluorides)		NIOSH 7906		3	6	480	15	1000	1000	8	15	IC-ECN	CF/CST 225-9001 61 C/HLD 225-1 87
Hydrogen		OSHA CSI										DET TB	DT 810-30
Hydrogen bromide		OSHA ID 165SG		3		97	3	200	200	8	15	IC	ST 226-10-03 35
Hydrogen bromide (acids, inorganic)		NIOSH 7903	1016		3	48	4.5	200	300	4	15	IC	ST 226-10-03 35
Hydrogen chloride (hydrochloric acid)	●	OSHA ID 174SG			5		7.5		500		15	IC	ST 226-10-03 35
Hydrogen chloride (hydrochloric acid) (acids, inorganic)	●	NIOSH 7903	1016		5	48	4.5	200	300	4	15	IC	ST 226-10-03 35
Hydrogen cyanide	●	NIOSH 6010			4.7		2-90		50-200		varies	VAS	ST 226-28 35
Hydrogen cyanide	●	OSHA 1015		10				28.4		8	15	IC-ELCM	PS 590-400 69
Hydrogen cyanide	●	OSHA ID 120		10		120	15	1000	1000	2	15	ISE	CST 225-3LF 86 IMP 225-36-2 59 IT 225-22 59 FLT 225-5 76 SP 225-2902 87
Hydrogen cyanide (cyanides)	●	NIOSH 7904			5 mg/m³ (10 min)		15		1000		15	ISE	FLT 225-2705 Δ 74 CST 225-2LF 86 IMP 225-36-2 59 IT 225-22 59 C/HLD 225-1 87
Hydrogen fluoride	●	NIOSH 7906		3	6	480	15	1000	1000	8	15	IC-ECN	CF/CST 225-9001 61 C/HLD 225-1 87
Hydrogen fluoride (acids, inorganic)	●	NIOSH 7903	1016	3	6	48	4.5	200	300	4	15	IC	ST 226-10-03 35
Hydrogen fluoride (as F)	●	OSHA ID 110		3		90	22	1500	1500	1	15	ISE	CF/CST 225-9001 61 C/HLD 225-1 87
Hydrogen fluoride (fluorides)	●	NIOSH 7902		3	6	480	30	1000	2000	8	15	ISE	CF/CST 225-9001 61 C/HLD 225-1 87
Hydrogen fluoride (fluorides)	●	NIOSH 7906		2.5 mg/m³		480		1000		8		IC-ECN	CF/CST 225-9001 61 C/HLD 225-1 87
Hydrogen peroxide (90%)	●	OSHA ID 126SG	1005	1		100		1000		100 min		DPP	IMP 225-36-2 59 IT 225-22 59
Hydrogen selenide (as Se)		OSHA CSI		0.05		480		1000		8		AA	IMP 225-36-2 59 IT 225-22 59
Hydrogen sulfide	●	NIOSH 6013			10 (10 min)	24	3	100	300	4	10	IC	ST NA SKC

Agency standards for OSHA listings represent the OSHA PELs reported in the 29 CFR 1910.1000 Part 1910, Section 1000.

References and abbreviations are found on pages 196-197.

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Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Hydrogen sulfide	●	NON 42	1414			12		1000		12 min		GC-FPD	SB 231-10 51
Hydrogen sulfide	●	OSHA 1008		10	20	12	7.5	50	500	4	15	IC	ST 226-177 38
Hydrogenated terphenyls		OSHA CSI				30		1000		30		GC-FID	FLT C/HLD 225-17-04 225-1 74 87 CST 225-2LF 86
Hydroquinone		NIOSH 5004			2 mg/m³ (15 min)		30		2000		15	HPLC-UV	F/CST 225-3-01 77 C/HLD 225-1 87
Hydroquinone		OSHA PV2094		2 mg/m³		20		200		100 min		HPLC-UV	ST 226-98 37
2-Hydroxy-4-methoxyacetophenone		OSHA CSI				10		200		50 min		HPLC-UV	ST 226-30 35
4-Hydroxy-4-methyl-2-pentanone *(see diacetone alcohol)*													
4-Hydroxy-4-methyl-2-petanone (alcohols combined)		NIOSH 1405		50		1-10		10-200		varies		GC-FID	ST 226-01 35
m-Hydroxyacetophenone		OSHA CSI				10		200		50 min		HPLC-UV	ST 226-30-04 35
m-Hydroxybenzoic acid		OSHA CSI				180		1000		3		HPLC-UV	F/CST 225-3-01 77 C/HLD 225-1 87
4-Hydroxycoumarin		OSHA CSI				10		200		50 min		HPLC-UV	ST 226-30-04 35
Hydroxyethyl acrylate		OSHA CSI				12		200		2		GC-FID	ST 226-15GWS 35
2-Hydroxyethyl methacrylate		OSHA CSI				10		200		50 min		GC-FID	ST 226-01 35
2-Hydroxypropyl acrylate		OSHA PV2078				10		100		100 min		GC-FID	ST 226-73 36
2-Imidazolidinethione (ethylene thiourea)		NIOSH 5011		LFC		480		1000		8		VAS	F/CST 225-803 73 C/HLD 225-1 87
Indene		OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-110 37
Indeno(1,2,3-cd)pyrene (polynuclear aromatic hydrocarbons by GC-MS)		ASTM D 6209				350 m³ (max)		225 L/min		1-24		GC-MS	PUF 226-131 43 FLT 225-1821 79
Indeno(1,2,3-cd)pyrene (polynuclear aromatic hydrocarbons by GC)		NIOSH 5515				480		2000		4		GC-FID	F/CST C/HLD 225-1713 225-1 74 87 ST 226-30-04 35
Indeno(1,2,3-cd)pyrene (polynuclear aromatic hydrocarbons by HPLC)		NIOSH 5506				480		2000		4		HPLC-FD	F/CST C/HLD 225-1713 225-1 74 87 ST 226-30-04 35
Indium		OSHA ID 121		0.1 mg/m³		960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Indium (elements by ICP HNO_3 digestion)		NIOSH 7303				15-500,000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Indium & compounds (as In)		OSHA CSI		0.1 mg/m³		960		2000		8		ICP-DCP	F/CST 225-3-01 77 C/HLD 225-1 87
Inorganic acids (acids, inorganic)		NIOSH 7903	1016									IC	ST 226-10-03 35
Iodine		NIOSH 6005			0.1		15		1000		15	IC	ST 226-67 36
Iodine		NON 16				48		100		8		IC	ST 226-67 36
Iodine		OSHA ID 212			0.1 (C)		2.5		500		5	IC	ST 226-80 36
Iodine (particulates)		OSHA ID 212			0.1		2.5		500		5	IC	ST 226-142 38
Iodine (vapour)		OSHA ID 212			0.1		2.5		500		5	IC	ST 226-80 36
Iodoform		OSHA CSI				10		100		100 min		GC-ECD	F/CST C/HLD 225-706 225-1 79 87 ST 226-93 37
Iridium		OSHA CSI				960		2000		8		AA	F/CST 225-3-01 77
Iron		OSHA ID 121				960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Iron (bulk)		OSHA ID 125G				480		2000		4		ICP-AES	F/CST C/HLD 225-3-01 225-1 or 87 F/CST 225-3100 77
Iron (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥		5 mg/m³ (dust, fume)		5-100		1000-4000		varies		ICP-AES	F/CST C/HLD 225-3-01 225-1 or 87 F/CST 225-803 73
Iron (elements by ICP HNO_3 digestion)		NIOSH 7303		0.5 mg/m³ (dust, fume)		1-5000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Iron (elements by ICP HNO_3/$HClO_4$ ashing)		NIOSH 7300	1455	5 mg/m³ (dust, fume)		5-100		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Iron (elements on wipes)		NIOSH 9102				wipe						ICP-AES	W 225-2414 124 TMP 225-2403 or TMP 225-2415 124
Iron & compounds (as Fe)		OSHA ID 121	1209			960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Iron oxide (elements by ICP HNO_3 digestion)		NIOSH 7303				1-5000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Iron oxide fume		OSHA ID 121	1045	10 mg/m³		960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Iron oxide fume		OSHA ID 125G		10 mg/m³		480		2000		4		ICP-AES	F/CST C/HLD 225-3-01 225-1 or 87 F/CST 225-3100 77
Iron pentacarbonyl (as Fe)		OSHA CSI				480	30	2000	2000	4	15	CLR	IMP 225-36-2 59 IT 225-22 59
Iron salts, soluble (as Fe)		OSHA ID 121	1208			960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Isoamyl acetate	●	OSHA 07	1151	100		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Isoamyl acetate (esters I)	●	NIOSH 1450		100		1-10		10-200		varies		GC-FID	ST 226-01 35
Isoamyl alcohol	●	OSHA CSI		100		10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
Isoamyl alcohol (alcohols combined)	●	NIOSH 1405		100	125 (skin)	1-10	1-10	10-200	10-200	varies	varies	GC-FID	ST 226-01 35
Isoamyl alcohol (alcohols III)	●	NIOSH 1402		100	125	10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
Isoamyl nitrite		OSHA CSI				5		20		4		HPLC-UV	ST 226-01 35
Isobutyl acetate	●	OSHA 07	1150	150		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Isobutyl acetate	●	OSHA 1009	1750	150		12	0.75	50	50	4	15	GC-FID	ST 226-01 35
Isobutyl acetate	●	OSHA 1009	1750	150				13.16	13.16	8	15	GC-FID	PS 575-002 64
Isobutyl acetate (esters I)	●	NIOSH 1450		150		1-10		10-200		varies		GC-FID	ST 226-01 35
Isobutyl acrylate	●	OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Isobutyl alcohol	●	OSHA 07	1149	100		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Isobutyl alcohol (alcohols combined)	●	NIOSH 1405		50		2-10		10-200		varies		GC-FID	ST 226-01 35
Isobutyl alcohol (alcohols II)	●	NIOSH 1401		50		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Isobutyl isobutyrate		OSHA PV2090				10		200		50 min		GC-FID	ST 226-01 35
Isobutyl nitrite		OSHA CSI				5		20		4		HPLC-UV	ST 226-01 35
Isobutylbenzene		OSHA CSI				6		200		30 min		GC-FID	ST 226-01 35
Isobutyraldehyde (aldehydes, screening)		NIOSH 2539				5		20		4		GC-FID & GC-MS	ST 226-118 37
Isobutyric acid		OSHA CSI				6		100		1		GC-FID	ST 226-110 37
Isobutyronitrile		OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-01 35

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References and abbreviations are found on pages 196-197.

Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	CLG/STEL (ppm)	Vol. (liter) TWA	CLG/ STEL	Rate (ml/min) TWA	CLG/ STEL	Time TWA (hrs)	CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Isocyanates *(see specific isocyanate)*		NIOSH 5521	1459	varies		480	10	1000	1000	8	10	HPLC-ELCHM & HPLC-UV	IMP 225-36-1 59 IT 225-22 59
Isocyanates *(see specific isocyanate)*		NIOSH 5522	1460	varies	varies	360	20	1000	2000	6	10	HPLC-FD	IMP 225-36-1 59 IT 225-22 59
Isocyanates *(see specific isocyanate)*		OR-OSHA 1010		varies	varies	45	5	1000	1000	45 min	5	HPLC	IMP 225-36-1 59 IT 225-22 59 CF/CST 225-9029 61
Isocyanates, aromatic (surface)												CI	W 769-1022 or TK 769-1002 122
Isocyanates, aliphatic (skin)												CI	PCH 769-3003 or W 769-1033 or TK 769-1003 122
Isocyanates, aliphatic (surface)												CI	W 769-1023 or TK 769-1003 122
Isocyanates, aromatic (skin)												CI	PCH 769-3002 or W 769-1032 or TK 769-1002 122
Isocyanates, total *(see specific isocyanate)*		NIOSH 5525		varies	varies	1-500	1-500	1000-2000	1000-2000	varies	varies	HPLC-UV	FLT 225-7 ‡ 79 CST 225-4 86 SP 225-27 or IOM 225-76A 92 FLT 225-702 ‡ 79
Isofenphos		OSHA CSI				480		1000		8		GC-FPD	ST 226-30-16 35
Isoflurane	●	OSHA 103	1349			12		50		4		GC-FID	ST 226-81A 36
Isooctane		OSHA CSI										DET TB	DT 810-101
Isooctyl alcohol	●	OSHA PV2033		100		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Isophorone	●	NIOSH 2508		4		10		20(50)		8(3.3)		GC-FID	ST 226-81A 36
Isophorone	●	NIOSH 2556		4		2-25		10-100		varies		GC-FID	ST 226-93 37
Isophorone	●	OSHA 07	1160	25		10		20(50)		8(3.3)		GC-FID	ST 226-81A 36
Isophorone diisocyanate		OSHA PV2034				60	15	1000	1000	1	15	HPLC-UV	CF/CST 225-9002 61 C/HLD 225-1 87
Isophorone diisocyanate (IPDI) 4098-71-9		OR-OSHA 1010		0.02	0.02	45	5	1000	1000	45 min	5	HPLC	IMP 225-36-1 59 IT 225-22 59 CF/CST 225-9029 61
Isophorone diisocyanate (isocyanates, total)		NIOSH 5525		45 µg/m³	180 µg/m³ (10 min) C	1-500		1000-2000		varies		HPLC-UV	FLT 225-7 ‡ 79 CST 225-4 86 SP 225-27 or IOM 225-76A 92 FLT 225-702 ‡ 79
Isophthalic acid		OSHA CSI				bulk						HPLC-UV	
Isoprene	●												DT 810-174D
Isopropyl acetate	●	NIOSH 1454				9		50		3		GC-FID	ST 226-01 35
Isopropyl acetate	●	NIOSH 1460				0.1-9.0		20-200		varies		GC-FID	ST 226-01 35
Isopropyl acetate	●	OSHA 07	1148	250		10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
Isopropyl alcohol	●	OSHA 07	1147	400		3	1.5	20	100	2.5	15	GC-FID	ST 226-01 35
Isopropyl alcohol	●	OSHA 109		400		18	3	50	200	6	15	GC-FID	ST 226-82 37
Isopropyl alcohol (alcohols I)	●	NIOSH 1400		400	500	3	3	20	200	2.5	15	GC-FID	ST 226-01 35
Isopropyl amine	●	OSHA CSI		5		90	15	1000	1000	1.5	15	GC-FID	IMP 225-36-2 59 IT 225-22 59
N-Isopropyl aniline		OSHA 78	1228			100		1000		100 min		HPLC-UV	CF/CST 225-9004 61 C/HLD 225-1 87
Isopropyl bromide		OSHA CSI				12		100		2		GC-FID	ST 226-01 35
Isopropyl CELLOSOLVE solvent *(see ethylene glycol isopropyl ether)*		OSHA CSI											
Isopropyl ether	●	NIOSH 1618		500		0.1-3		10-50		varies		GC-FID	ST 226-01 35
Isopropyl ether	●	OSHA 07	1146	500		3	0.75	20	50	2.5	15	GC-FID	ST 226-01 35
Isopropyl glycidyl ether	●	NIOSH 1620			50 (15 min)		3		200		15	GC-FID	ST 226-01 35
Isopropyl glycidyl ether	●	OSHA 07	1145	50		10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
Isopropyl m-chlorocarbanilate		OSHA CSI				30		1000		30 min		HPLC-UV	IMP 225-36-1 59 IT 225-22 59
Isovaleraldehyde		ASTM D 5197				varies		500-1200		5 min-24 hrs		HPLC-UV	ST 226-120 ○ or ST 226-119 37
Isovaleraldehyde (aldehydes, screening)		NIOSH 2539				5		20		4		GC-FID & GC-MS	ST 226-118 37
Jet fuel		OSHA CSI					3		200		15	GC-FID	ST 226-01 35
Kaolin (particulates, respirable)		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-01-02 95 CST 225-3LF 86
Kaolin (particulates, total)		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Kaolin (respirable dust)		OSHA CSI		5 mg/m³		varies		varies		varies		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-105 85 CST 225-3LF 86
Kaolin (total dust)		OSHA CSI		15 mg/m³		960		2000		8		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-3LF 86
Kathon 886 (Kathon biocide)		NON 55				50	7.5	200	500	4	15	HPLC-UV	ST 226-99 37
Kepone		NIOSH 5508		1 µg/m³		480		1000		8		GC-ECD	F/CST 225-3-01 77 IMP 225-36-1 59 IT 225-22 59
Kepone		OSHA CSI				480		1000		8		GC-ECD	F/CST 225-3-01 77 IMP 225-36-1 59 IT 225-22 59
Kerosene		OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Kerosene		OSHA PV2139				20		100		200 min		GC-FID	ST 226-01 35
Kerosene (naphthas)		NIOSH 1550		100 mg/m³		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Ketene		OSHA CSI		0.5		50	15	1000	1000	50 min	15	CLR	IMP 225-36-2 59 IT 225-22 59
Ketones (screening)		NIOSH 2549				5		20		4		GC-MS	ST 226-330 39
Ketones *(see Environmental Sampling Guide)*		EPA TO-5											
Ketones I *(see specific compounds)*		NIOSH 1300		varies		varies		10-200		varies		GC-FID	ST 226-01 35
Ketones I *(see specific compounds)*		NIOSH 2555				varies		varies		varies		GC-FID	ST NA SKC
Ketones II *(see specific compounds)*		NIOSH 1301		varies		varies		varies		8		GC-FID	ST 226-01 35
Ketones II *(see specific ketone)*		NIOSH 2553		varies	varies	1-25	1-25	10-200	10-200	varies	varies	GC-FID	ST NA SKC
Lactic acid		OSHA CSI				800		2000		400 min		IC	ST 226-01 35
Lactose powder		NON 53											F/CST 225-1725 or FLT 225-2714 and CST 225-2257 and SP 225-2901 87
Lake Red C		OSHA CSI				300		2000		2.5		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Landrin		OSHA CSI				60		1000		1		HPLC-UV	ST 226-30-16 35

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References and abbreviations are found on pages 196-197.

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Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Lanthanum (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥				5-1000		1000-4000		varies		ICP-AES	F/CST 225-3-01 or F/CST 225-803 73; C/HLD 225-1 87
Lanthanum (elements by ICP $HNO_3/HClO_4$ ashing)		NIOSH 7300	1455			5-1000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Lanthanum (elements on wipes)		NIOSH 9102				wipe						ICP-AES	W 225-2414 124 TMP 225-2403 or TMP 225-2415 124
Lasso (aroclor)		OSHA PV2035				100		1000		100 min		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Lead		NIOSH 7082	1034	< 0.1 mg/m³		720		1500		8		AAS-F	F/CST 225-3-01 77 C/HLD 225-1 87
Lead		NIOSH 7105	1034	< 0.1 mg/m³		720		1500		8		AAS-GF	F/CST 225-3-01 77 C/HLD 225-1 87
Lead (by field portable XRF)		NIOSH 7702		< 0.1 mg/m³		960		2000		8		XRF	F/CST 225-3-01 77
Lead (by portable ultrasound extraction/ASV)		NIOSH 7701		0.05 mg/m³		20-1500		1000-4000		varies		P ASV	F/CST 225-3-01 77 C/HLD 225-1 87
Lead (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥		0.05 mg/m³		50-2000		1000-4000		varies		ICP-AES	F/CST 225-3-01 or F/CST 225-803 73; C/HLD 225-1 87
Lead (elements by ICP HNO_3 digestion)		NIOSH 7303		0.5 mg/m³		35-100,000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Lead (elements by ICP $HNO_3/HClO_4$ ashing)		NIOSH 7300	1034	0.05 mg/m³		50-2000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Lead (elements on wipes)		NIOSH 9102				wipe						ICP-AES	W 225-2414 124 TMP 225-2403 or TMP 225-2415 124
Lead (ICP analysis of metal/metalloid particulates from solder operations)		OSHA ID 206				480		2000		4		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Lead (in air by chemical spot test)		NIOSH 7700	1369	< 0.1 mg/m³		240		2000		2		SPOT	W 225-2404 124 F/CST 225-3-01 77
Lead (in dust wipes)		NIOSH 9105										SPOT	W 550-001 or W 550-002 121
Lead (in surface dust)		ASTM E 1792				bulk						Varies	W 225-2414 124 TMP 225-2403 124
Lead (in surface dust)		OSHA ID 125G				wipe						ICP-AES	W 225-2414 124 TMP 225-2403 124
Lead (in workplace air)		ASTM D 6785				varies		varies		varies		AAS-F	IOM 225-70A 92 FLT 225-1930 76
Lead (on surfaces)		NIOSH 9100										AA-F or AA-GF or ICP	W 225-2401A 124
Lead chromate (as Pb)		OSHA CSI		50 µg/m³		960		2000		8		AA	F/CST 225-3-01 77 C/HLD 225-1 87
Lead chromate (as Pb) *(see lead, inorganic fumes & dusts or chromic acid & chromates)*		OSHA CSI											
Lead chromate (CR(VI))		OSHA ID 215 (V2)	1439	0.005 mg/m³		960		2000		8		IC-UV	F/CST 225-802 Ω 73 C/HLD 225-1 87
Lead oxide (as lead)		NIOSH 7082	1034	< 0.1 mg/m³		720		1500		8		AAS-F	F/CST 225-3-01 77 C/HLD 225-1 87
Lead oxide (as Pb)		NIOSH 7105	1034	< 0.1 mg/m³		720		1500		8		AAS-GF	F/CST 225-3-01 77 C/HLD 225-1 87
Lead oxide (by field portable XRF)		NIOSH 7702		< 0.1mg/m³		960		2000		8		XRF	F/CST 225-3-01 77
Lead oxide (by portable ultrasound extraction/ASV)		NIOSH 7701		0.05 mg/m³		20-1500		1000-4000		varies		P ASV	F/CST 225-3-01 77 C/HLD 225-1 87
Lead sulfide (as Pb)		NIOSH 7505		< 0.1 mg/m³		750		2500		5		XRD	F/CST 225-803 73 CYC 225-01-02 95 C/HLD 225-1 87
Lead, inorganic fumes & dusts (as Pb)		OSHA ID 121	1196	0.05 mg/m³		960	30	2000	2000	8	15	AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Lead, inorganic fumes & dusts (as Pb)		OSHA ID 125G		0.05 mg/m³		480	30	2000	15	4		ICP-AES	F/CST 225-3-01 or F/CST 225-3100 77; C/HLD 225-1 87
Lead, inorganic surface dusts (as Pb)		OSHA ID 121	1179									AA or AES	W 225-2401A 124
Limestone (particulates, total)		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 CST 225-2LF 86 C/HLD 225-1 87
Limestone *(see calcium carbonate)*													
Limestone *(see dust, total & respirable nuisance)*													
Limonene	●	OSHA PV2036				10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Limonene (terpenes)	●	NIOSH 1552				24		50		8		GC-FID	ST 226-01 35
Lindane		OSHA CSI		0.5 mg/m³		240		1000		4		GC-ECD	F/CST 225-706 79 C/HLD 225-1 87 IMP 225-36-1 59 IT 225-22 59
Lindane (gamma-BHC)		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
Linuron		ASTM D 4861				240-7200		1000-5000		4-24		HPLC-UV	PUF 226-92 42
Linuron		OSHA CSI				240		1000		4		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Lithium		OSHA ID 121				960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Lithium (elements by ICP Aqua Regia ashing)		NIOSH 7301				100-2000		1000-4000		varies		ICP-AES	F/CST 225-3-01 or F/CST 225-803 73; C/HLD 225-1 87
Lithium (elements by ICP $HNO_3/HClO_4$ ashing)		NIOSH 7300	1455			100-2000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Lithium hydride (as Li)		OSHA ID 121		0.025 mg/m³		960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Lithium hydroxide (alkaline dust)		NIOSH 7401				960		2000		8		TITRA	FLT 225-17-01 74 CST 225-2LF 86 C/HLD 225-1 87
Lithium hydroxide (as Li)		OSHA ID 121				960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
LPG (liquified petroleum gas)		OSHA CSI		1000								DET TB	DT 810-100A
Machette		OSHA CSI				100		1000		100 min		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Magnesite (particulates, respirable)		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 CYC 225-01-02 95 C/HLD 225-1 87 CST 225-3LF 86
Magnesite (particulates, total)		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 CST 225-2LF 86 C/HLD 225-1 87
Magnesite *(see dust, total & respirable nuisance)*		OSHA CSI											
Magnesium		OSHA ID 121	1192			960	30	2000	2000	8	15	AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Magnesium (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥		10 mg/m³ (fume, as oxide)		5-67		1000-4000		varies		ICP-AES	F/CST 225-3-01 or F/CST 225-803 73; C/HLD 225-1 87
Magnesium (elements by ICP HNO_3 digestion)		NIOSH 7303				1-10,000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Magnesium (elements by ICP $HNO_3/HClO_4$ ashing)		NIOSH 7300	1455	10 mg/m³ (fume, as oxide)		5-67		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Magnesium oxide (as Mg, elements by ICP)		NIOSH 7303		10		5-33000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Magnesium oxide fume (respirable dust)		OSHA ID 121	1214	5 mg/m³		960		2000		8		GR & AA or GR & AES	F/CST 225-3-01 77 CYC 225-105 85 C/HLD 225-1 87
Magnesium oxide fume (total dust)		OSHA ID 121	1213	15 mg/m³		960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Malathion		ASTM D 4861				240-7200		1000-5000		4-24		GC-NPD	PUF 226-92 42
Malathion		OSHA 62	1397	15 mg/m³		60		1000		1		GC-FPD	ST 226-30-16 35
Malathion (organophosphorus pesticides)		NIOSH 5600		10 mg/m³		60		1000		1		GC-FPD	ST 226-58 36

Agency standards for OSHA listings represent the OSHA PELs reported in the 29 CFR 1910.1000 Part 1910, Section 1000.

References and abbreviations are found on pages 196-197.

Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Malbranchea species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Malbranchea species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Maleic anhydride	●	NIOSH 3512		0.25		360		1000		6		HPLC-UV	IMP 225-36-2 59 IT 225-22 59
Maleic anhydride	●	OSHA 25		0.25		20		100		3.3		HPLC-UV	ST 226-30-07 35 ST 226-30 35
Maleic anhydride	●	OSHA 86		0.25		60		500		2		HPLC-UV	CF/CST 225-9021 †† 61 C/HLD 225-1 87
Maneb		OSHA 107				500		2000		250		HPLC-UV	F/CST 225-3-01 77 C/HLD 225-1 87
Maneb		OSHA CSI										W	W 225-2401A 124
Manganese (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥		1 mg/m³	3 mg/m³	5-200	5-200	1000-4000	1000-4000	varies	varies	ICP-AES	F/CST 225-3-01 or C/HLD 225-1 87 F/CST 225-803 73
Manganese (elements by ICP HNO_3 digestion)		NIOSH 7303		1 mg/m³	3 mg/m³	0.05-10,000	0.05-10,000	1000-4000	1000-4000	varies	varies	ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Manganese (elements by ICP HNO_3/$HClO_4$ ashing)		NIOSH 7300	1455	1 mg/m³	3 mg/m³	5-200	5-200	1000-4000	1000-4000	varies	varies	ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Manganese (elements on wipes)		NIOSH 9102				wipe						ICP-AES	W 225-2414 124 TMP 225-2415 124 TMP 225-2403 or
Manganese & compounds (as Mn)		OSHA ID 121	1194		5 mg/m³ (C)	960	10	2000	2000	8	5	AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Manganese & compounds (as Mn)		OSHA ID 125G			5 mg/m³		10		2000		5	ICP-AES	F/CST 225-3-01 or C/HLD 225-1 87 F/CST 225-3100 77
Manganese cyclopentadienyl tricarbonyl (as Mn)		OSHA CSI				480		1000		8		AA	F/CST 225-3-01 77 IT 225-22 59 IMP 225-36-2 59
Manganese fume		OSHA ID 125G			5 mg/m³	480	30	2000	2000	4	15	ICP-AES	F/CST 225-3-01 or C/HLD 225-1 87 F/CST 225-3100 77
Manganese fume (as Mn)		OSHA ID 121	1195		5 mg/m³ (C)	960	30	2000	2000	8	15	AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Manganese tetroxide (as Mn)		OSHA ID 121	1191			960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Manganese tetroxide (as Mn)		OSHA ID 125G				480		2000		4		ICP-AES	F/CST 225-3-01 or C/HLD 225-1 87 F/CST 225-3100 77
Marble (particulates, respirable)		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 CYC 225-01-02 95 C/HLD 225-1 87 CST 225-3LF 86
Marble (particulates, total)		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 CST 225-2LF 86 C/HLD 225-1 87
Marble *(see dust, total & respirable nuisance)*													
MCPA (2-methyl-4-chlorophenoxyacetic acid)		OSHA CSI				240		500		8		HPLC	F/CST 225-706 79 C/HLD 225-1 87
MCPP		OSHA CSI				240		1000		4		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
MDI (4,4-methylene bisphenyl isocyanate)		OSHA 47		50 µg/m³	200 µg/m³		10		1000		10	HPLC-UV	CF/CST 225-9002 or C/HLD 225-1 87 CF/CST 225-9013 61
MDI (4,4-methylenebis[phenyl isocyanate]) (isocyanates, total)		NIOSH 5525		50 µg/m³	200 µg/m³ (10 min) C	1-500		1000-2000		varies		HPLC-UV	FLT 225-7 ‡ 79 SP 225-27 or FLT 225-702 79 CST 225-4 86 IOM 225-76A 92
MDI (4,4'-methylenebisphenyl isocyanate) (isocyanates)		NIOSH 5521	1001	50 µg/m³	200 µg/m³ (10 min) C	480	10	1000	1000	8	10	HPLC-ELCHM & HPLC-UV	IMP 225-36-1 59 IT 225-22 59
MEK *(see methyl ethyl ketone)*													
Melamine		OSHA CSI				40		1000		40 min		HPLC	F/CST 225-709 79 C/HLD 225-1 87
Melengestrol acetate		OSHA CSI				120		1000		2		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Menadione		OSHA CSI				10		20(50)		8(3.3)		HPLC-UV	ST 226-30 35
Mercaptans *(see specific compounds)*		NIOSH 2542	1330		0.5 (15 min)	48	12	100	200	8	60	GC-FPD	CF/CST 225-9007 61 C/HLD 225-1 87
Mercaptoethanol		OSHA CSI				10		20(50)		8(3.3)		GC-FPD	ST 226-10 35
Mercury		NIOSH 6009		0.05 mg/m³		48		200		4		AA	ST 226-17-1A 35 F/CST 225-3-01 77
Mercury (Rathje & Marcero)		NON 17				48		100		8		AA	ST 226-17-1A 35
Mercury (Rathje & Marcero)		NON 17				varies		1000-3000		varies		AA	ST 226-17-3A 35
Mercury (vapor)		OSHA ID 140	1677	0.1 mg/m³		3-100		200		varies		AA	ST 226-17-1A 35 F/CST 225-3-01 77
Mercury (vapor)		OSHA ID 140	1677	0.1 mg/m³		9.6		20		8		AA	CH 520-03 68 C 520-02A 68
Mercury, aryl & inorganic (particulate Hg)		OSHA ID 145			0.01 mg/m³		30		2000		15	AA	F/CST 225-3-01 77 C/HLD 225-1 87
Mesityl oxide	●	OSHA 07	1144	25		10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
Mesityl oxide (ketones II)		NIOSH 2553		10		1-25		10-200		varies		GC-FID	ST NA SKC
Mesityl oxide (ketones II)	●	NIOSH 1301		10		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Mesitylene (1,3,5-trimethylbenzene)	●												PS 575-001 or PS 575-002 64
Mestranol		OSHA PV2068				480		2000		4		HPLC	F/CST 225-802 73 C/HLD 225-1 87
Metal & metalloid particulates		OSHA ID 121	1177	varies	varies	960	30	2000	2000	8	15	AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Metal & metalloid particulates		OSHA ID 125G	1371	varies	varies	480	30	2000	2000	4	15	ICP-AES	F/CST 225-3-01 or C/HLD 225-1 87 F/CST 225-3100 77
Metal removal fluid (aerosol)		ASTM D 7049				960		2000		8		GR	FLT 225-27-07 74 C/HLD 225-1 87 CST 225-2LF 86
Metal working fluids (aerosols)		ASTM D 7049				960		2000		8		GR	FLT 225-27-07 74 C/HLD 225-1 87 CST 225-2LF 86
Metals (in settled dust)		ASTM D 6966				wipe		wipe		wipe		Varies	W 225-2414 124 TMP 225-2415 124 TMP 225-2403 or
Metals in workplace atmospheres		ASTM D 4185	1426			varies		2000		varies		AAS	F/CST 225-3-01 77 C/HLD 225-1 87
Metals, trace (elements by ICP HNO_3/$HClO_4$ ashing)		NIOSH 7300	1455	varies	varies	varies	varies	1000-4000	1000-4000	varies	varies	ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Metalworking fluids (thoracic particulates)		NIOSH 5524		0.4 mg/m³ (thoracic particulates)		2000		varies		varies		GR	PPI 225-381 96 IS 225-388 96 SCN 225-26 87 FLT 225-27-07 74 SP 225-27 or
Metalworking fluids (total particulates)		NIOSH 5524	1726	0.5 mg/m³ (total particulates)		1000 (min)		2000		varies		GR	FLT 225-27-07 74 C/HLD 225-1 87 CST 225-4 86
Methacrylic acid		OSHA PV2005				24		100		4		HPLC-UV	ST 226-30-08 35
Metham sodium		OSHA CSI				40		1000		40 min		HPLC-UV	ST 226-58 36
Methamidophos		OSHA CSI				480		1000		8		GC-FPD	ST 226-30-16 35
Methamidophos (organophosphorus pesticides)		NIOSH 5600				240		1000		4		GC-FPD	ST 226-58 36
Methane		OSHA CSI										DET TB	DT 800-20001
Methanol (methyl alcohol)		NIOSH 2000		200	250	5	3	20	200	4	15	GC-FID	ST 226-51 36
Methidathion		OSHA PV2074				60		1000		1		GC-ECD	ST 226-58 36

Agency standards for OSHA listings represent the OSHA PELs reported in the 29 CFR 1910.1000 Part 1910, Section 1000.

References and abbreviations are found on pages 196-197.

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Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/ STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/ STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Methiocarb (organonitrogen pesticides)		NIOSH 5601				240		1000		4		HPLC-UV	ST 226-58 or ST 226-30-16 35
Methomyl		OSHA PV2114				60		1000		1		HPLC-UV	ST 226-30-16 35
Methomyl (organonitrogen pesticides)		NIOSH 5601		2.5 mg/m³		240		1000		4		HPLC-UV	ST 226-58 or ST 226-30-16 35
Methotrexate		OSHA PV2146				120		1000		2		HPLC-UV	ST 226-30-16 35
2-Methoxy-1-propanol	●	OSHA 99				10		100		100 min		GC-FID	ST 226-01 35
2-Methoxy-1-propyl acetate	●	OSHA 99				10		100		100 min		GC-FID	ST 226-01 35
1-Methoxy-2-propanol	●	OSHA 99				10		100		100 min		GC-FID	ST 226-01 35
1-Methoxy-2-propanol (glycol ethers)	●	NIOSH 2554				3-25		100-200		varies		GC-FID	ST 226-81A 36
1-Methoxy-2-propyl acetate	●	OSHA 99				10		100		100 min		GC-FID	ST 226-01 35
1-Methoxy-2-propyl acetate (glycol ethers)	●	NIOSH 2554				3-25		100-200		varies		GC-FID	ST 226-81A 36
Methoxychlor		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
Methoxychlor		OSHA PV2038		15 mg/m³		60		1000		1		GC-ECD	ST 226-30-16 35
2-Methoxyethanol (methyl CELLOSOLVE solvent)	●	OSHA 79	1277	25		48	15	100	1000	8	15	GC-FID	ST 226-01 35
2-Methoxyethanol (methyl CELLOSOLVE solvent) (alcohols IV)	●	NIOSH 1403	1274	0.1 (skin)		6-50		10-50		varies		GC-FID	ST 226-01 35
2-Methoxyethyl acetate (methyl CELLOSOLVE acetate)	●	OSHA 79	1277	25		48	15	100	1000	8	15	GC-FID	ST 226-01 35
Methoxyflurane		OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-01 35
2-Methoxyphenol		OSHA PV2039				20		200		100 min		GC-FID	ST 226-95 37
3-Methoxyphenol		OSHA PV2039				20		200		100 min		GC-FID	ST 226-95 37
4-Methoxyphenol		OSHA PV2039				20		200		100 min		GC-FID	ST 226-95 37
6-Methoxytetralone		OSHA CSI				10		20(50)		8(3.3)		HPLC-UV	ST 226-30 35
Methyl acetate	●	NIOSH 1458		200	250	5	3	20	200	4	15	GC-FID	ST 226-01 35
Methyl acetate	●	OSHA 07	1143	200		5	3	20	200	4	15	GC-FID	ST 226-01 35
Methyl acetylene-propadiene mixture		OSHA 07	1142	1000		2	0.75	20	50	100 min	15	GC-FID	ST 226-01 35
Methyl acrylate	●	NIOSH 1459		10		5		20		4		GC-FID	ST 226-01 35
Methyl acrylate		NIOSH 2552		10		1-5		10-200		varies		GC-FID	ST NA SKC
Methyl acrylate	●	NON 54		5	15	10	3	20	200	8	15	GC-FID	ST 226-81A 36
Methyl acrylate	●	OSHA 92		10		12		50		4		GC-FID	ST 226-73 36
Methyl acrylonitrile		OSHA 37				20		200		100 min		GC-NPD	ST 226-01 35
Methyl alcohol (methanol)		NIOSH 2000		200	250	5	3	20	200	4	15	GC-FID	ST 226-51 36
Methyl alcohol (RH < 50% at 25 C)		OSHA 91	1328	200		3	0.75	50	50	1	15	GC-FID	ST 226-82 37
Methyl alcohol (RH > 50% at 25 C)		OSHA 91	1328	200		5	0.75	50	50	100 min	15	GC-FID	ST 226-82 37
Methyl amine	●	OSHA 40		10		10		20		8		HPLC-UV	ST 226-96 37
Methyl arsonic acid (arsenic, organo-)		NIOSH 5022				480		1000		8		IC-AA	FLT 225-17-01 74 CST 225-2LF 86 C/HLD 225-1 87
Methyl bromide		ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
Methyl bromide		OSHA PV2040			20		3		200		15	GC-FID	ST 226-83 37
Methyl butyl ketone (ketones I)		NIOSH 2555				1-10		10-200		varies		GC-FID	ST NA SKC
Methyl butyl ketone (MBK, 2-hexanone) (ketones I)	●	NIOSH 1300		1		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Methyl CELLOSOLVE acetate (2-methoxyethyl acetate)	●	NIOSH 1451		0.1		12		50		4		GC-FID	ST 226-01 35
Methyl CELLOSOLVE acetate (2-methoxyethyl acetate)	●	OSHA 79	1277	25		48	15	100	1000	8	15	GC-FID	ST 226-01 35
Methyl CELLOSOLVE solvent (2-methoxyethanol)	●	OSHA 79	1277	25		48	15	100	1000	8	15	GC-FID	ST 226-01 35
Methyl CELLOSOLVE solvent (2-methoxyethanol) (alcohols IV)	●	NIOSH 1403	1274	0.1 (skin)		6-50		10-50		varies		GC-FID	ST 226-01 35
Methyl chloride		ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
Methyl chloride		NIOSH 1001		LFC			0.5		100		5	GC-FID	ST 226-09 35 ST 226-01 35
Methyl chloroform	●	ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
Methyl chloroform (1,1,1-trichloroethane)	●	OSHA 14		350		3	3	20	200	2.5	15	GC-FID	ST 226-01 35
Methyl chloroform (1,1,1-trichloroethane) (hydrocarbons, halogenated)	●	NIOSH 1003			350		3		10-200		varies	GC-FID	ST 226-01 35
Methyl cyclohexane	●	OSHA 07	1069	500		5		20		4		GC-FID	ST 226-01 35
Methyl cyclohexane (hydrocarbons, BP 36 to 216 C)	●	NIOSH 1500		400		4		10-200		varies		GC-FID	ST 226-01 35
Methyl demeton		OSHA CSI				480		1000		8		GC-FPD	ST 226-30-16 35
N-Methyl dicyclohexylamine		OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-10 35
Methyl ethyl ketone		OSHA 1004		200		12		50		4		GC-FID	ST NA SKC
Methyl ethyl ketone (ketones I)		NIOSH 2555				1-10		10-200		varies		GC-FID	ST NA SKC
Methyl ethyl ketone (MEK, 2-butanone)		OSHA 1004		200				16.88		8		GC-FID	PS 575-002 64
Methyl ethyl ketone (MEK) *(see 2-butanone)*	●												
Methyl ethyl ketone (MEK) *(see 2-butanone)*	●	NIOSH 2500	1012	200	300	10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-81A 36
Methyl ethyl ketone peroxide		NIOSH 3508	1002		0.2 (15 min)		120		1000		120	VAS	IMP 225-36-1 59 IT 225-22 59
Methyl ethyl ketone peroxide		OSHA 77					15		1000		15	HPLC-UV	ST 226-93 37
Methyl formate		OSHA PV2041		100		3		50		1		GC-FID	ST 226-83 37
Methyl iodide	●	NIOSH 1014		2		48		100		8		GC-FID	ST 226-01 35
Methyl iodide	●	OSHA CSI		5		50		200		4		GC-FID	ST 226-01 35
Methyl isoamyl acetate (esters I)		NIOSH 1450		50		1-10		10-200		varies		GC-FID	ST 226-01 35
Methyl isoamyl ketone	●	OSHA PV2042		100		24		50		8		GC-FID	ST 226-01 35
Methyl isobutyl carbinol (methyl amyl alcohol)	●	OSHA 07	1068	25		10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
Methyl isobutyl carbinol (methyl amyl alcohol) (alcohols combined)	●	NIOSH 1405		25	40 (skin)	1-10	1-10	10-200	10-200	varies	varies	GC-FID	ST 226-01 35
Methyl isobutyl carbinol (methyl amyl alcohol) (alcohols III)	●	NIOSH 1402		25	40	10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
Methyl isobutyl ketone		OSHA 1004		100		12		50		4		GC-FID	ST NA SKC
Methyl isobutyl ketone (hexone)	●	OSHA 07	1070	100		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Methyl isobutyl ketone (hexone)		OSHA 1004		100				13.62		8		GC-FID	PS 575-002 64
Methyl isobutyl ketone (hexone) (ketones I)	●	NIOSH 1300		50	75	10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35

Agency standards for OSHA listings represent the OSHA PELs reported in the 29 CFR 1910.1000 Part 1910, Section 1000.

References and abbreviations are found on pages 196-197.

Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	CLG/STEL (ppm)	Vol. (liter) TWA	CLG/STEL	Rate (ml/min) TWA	CLG/STEL	Time TWA (hrs)	CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Methyl isobutyl ketone (ketones I)		NIOSH 2555		50		1-10		10-200		varies		GC-FID	ST 226-01 35 / NA SKC
Methyl isocyanate (MIC)		OSHA 54		0.02		15		50		5		HPLC-FD	ST 226-01 35 / NA SKC
Methyl isopropyl ketone	●	OSHA CSI				10		20		8		GC-FID	ST 226-01 35
Methyl isothiocyanate		OSHA CSI				120		1000		2		GC-FID	ST 226-01 35
Methyl mercaptan		NIOSH 2542	1330		0.5 (15 min)	48	12	100	200	8	60	GC-FPD	CF/CST 225-9007 61 / C/HLD 225-1 87
Methyl mercaptan		NON 42	1412			12		1000		12 min		GC-FPD	SB 231-10 51
Methyl mercaptan		OSHA 26			10	20		200		100 min		GC-FPD	CF/CST 225-9007 61 / C/HLD 225-1 87
Methyl methacrylate	●	NIOSH 2537		100		1-8		10-50		varies		GC-FID	ST 226-30-06 35
Methyl methacrylate	●	NON 54		50	75	10	3	20	200	8	15	GC-FID	ST 226-81A 36
Methyl methacrylate	●	OSHA 94		100		3		50		1		GC-FID	ST 226-73 36
4-Methyl morpholine		OSHA CSI				30		100		5		GC-FID	ST 226-98 37
Methyl n-amyl ketone (2-heptanone) (Ketones II)		NIOSH 2553		100		1-25		10-200		varies		GC-FID	ST NA SKC
Methyl parathion		ASTM D 4861				240-7200		1000-5000		4-24		GC-NPD	PUF 226-92 42
Methyl parathion		OSHA PV2112				480		1000		8		GC-FPD	ST 226-30-16 35
Methyl parathion (organophosphorus pesticides)		NIOSH 5600		0.2 mg/m³		240		1000		4		GC-FPD	ST 226-58 36
Methyl propyl ketone (2-pentanone)	●	OSHA 07		200		10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
Methyl propyl ketone (ketones I)		NIOSH 2555				1-10		10-200		varies		GC-FID	ST NA SKC
Methyl silicate		OSHA CSI				9		50		3		GC-FID	ST 226-30-04 35
alpha-Methyl styrene	●	OSHA 07	1066		100 (C)	30	3	200	200	2.5	15	GC-FID	ST 226-01 35
alpha-Methyl styrene (hydrocarbons, aromatic)	●	NIOSH 1501		50	100	1-30	1-30	10-200	10-200	varies	varies	GC-FID	ST 226-01 35
beta-Methyl styrene (hydrocarbons, aromatic)		NIOSH 1501		50	100	1-30	1-30	10-200	10-200	varies	varies	GC-FID	ST 226-01 35
17-a-Methyl testosterone		OSHA PV2001				60		1000		1		HPLC-UV	F/CST 225-706 79 / C/HLD 225-1 87
Methyl-2-cyanoacrylate		OSHA 55				12		100		2		HPLC-UV	ST 226-98 37
3-Methyl-2-cyclopentene-2-ol-one		OSHA CSI				10		200		50 min		HPLC-UV	ST 226-30-04 35
1-Methyl-2-pyrrolidinone		OSHA PV2043				10		200		50 min		GC-FID	ST 226-01 35
N-Methyl-2-pyrrolidinone		NIOSH 1302				96		200		8		GC-NPD, FID	ST 226-01 35
N-Methyl-2-pyrrolidinone		OSHA PV2043				10		200		50 min		GC-FID	ST 226-01 35
5-Methyl-3-heptanone (ketones II)		NIOSH 2553		25		1-25		10-200		varies		GC-FID	ST NA SKC
5-Methyl-3-heptanone (ketones II)	●	NIOSH 1301		25		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
2-Methyl-4-isothiazolin-3-one (Kathon 886)		NON 55		1.5 mg/m³	4.5 mg/m³	50	7.5	200	500	4	15	HPLC-UV	ST 226-99 37
Methyl-n-amyl ketone (2-heptanone)	●	OSHA CSI		100		24		200		2		GC-FID	ST 226-01 35
Methyl-n-amyl ketone (2-heptanone) (ketones II)	●	NIOSH 1301		100		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
5-Methyl-o-anisidine		OSHA CSI				60		1000		1		HPLC-UV	ST 226-30-04 35
Methyl-tert-amyl ether (tert-amyl methyl ether)	●											GC-FID	PS 575-001 64
Methyl-tert-butyl ether	●	NIOSH 1615	1017			96		200		8		GC-FID	ST 226-37 36
Methylacetylene (propyne)		OSHA CSI		1000		2		50		40 min		GC-FID	ST 226-01 35
Methylal (dimethoxymethane)	●	NIOSH 1611		1000		1.8		20		1.5		GC-FID	ST 226-01 35
Methylal *(see dimethoxymethane)*	●												
6-Methylcoumarin		OSHA CSI				10		20(50)		8(3.3)		HPLC-UV	ST 226-30 35
Methylcyclohexanol	●	NIOSH 1404		50		12		25		8		GC-FID	ST 226-01 35
Methylcyclohexanol	●	OSHA CSI		100		12		25		8		GC-FID	ST 226-01 35
Methylcyclohexanone		NIOSH 2521		50	75	3		50		1		GC-FID	ST 226-115 37
o-Methylcyclohexanone		OSHA CSI		100		6	0.75	50	50	2	15	GC-FID	ST 226-115 37
Methylcyclopentadienyl manganese tricarbonyl (as Mn)		OSHA CSI			5 (C)	10		200		1		AA	ST 226-30 35
N-Methyldiethanolamine		OSHA CSI				20		100		3.3		GC-NPD	ST 226-42-02 36
4,4-Methylene bisphenyl isocyanate (MDI)		OSHA 47	1242		200 µg/m³		15		1000		15	HPLC-UV	CF/CST 225-9002 or 225-9013 61 / C/HLD 225-1 87
4,4-Methylene bisphenyl isocyanate (MDI) (isocyanates)		NIOSH 5521	1001	50 µg/m³	200 µg/m³ (10 min) C	480	10	1000	1000	8	10	HPLC-ELCHM & HPLC-UV	IMP 225-36-1 59 IT 225-22 59
4,4-Methylene bisphenyl isocyanate (MDI) (isocyanates)		OR-OSHA 1010		0.02	0.005	45	5	1000	1000	45 min	5	HPLC	IMP 225-36-1 59 IT 225-22 59 / CF/CST 225-9029 61
Methylene chloride	●	NIOSH 1005	1018	LFC		2	1.5	20	100	1.6	15	GC-FID	ST 226-01 35
Methylene chloride	●	OSHA 59	1358	25	125	10	0.25	50	50	3.3	5	GC-FID	ST 226-09-02 35
Methylene chloride		OSHA 80		25	125	3	0.25	50	50	1	5	GC-FID	ST NA SKC
Methylene-bis-(4-cyclohexylisocyanate)		OSHA PV2092					15		1000		15	HPLC-UV	CF/CST 225-9013 61 / C/HLD 225-1 87
Methylene-bis-(4-cyclohexylisocyanate) (isocyanates, total)		NIOSH 5525			110 µg/m³ (10 min) C		1-500		1000-2000		varies	HPLC-UV	FLT 225-7 ‡ 79 / SP 225-27 or / FLT 225-702 ‡ 79 / CST 225-4 86 / IOM 225-76A 92
2,2'-Methylene-bis(4-chlorophenol)		OSHA CSI				750		2000		6.25		HPLC-UV	F/CST 225-709 79 / C/HLD 225-1 87
4,4'-Methylenebis(2-chloroaniline) (MOCA)		OSHA 71	1234			100		1000		100 min		GC-ECD	CF/CST 225-9004 61 / C/HLD 225-1 87
4,4-Methylenebisphenyl isocyanate (MDI) (isocyanates, total)		NIOSH 5525		50 µg/m³	200 µg/m³ (10 min) C	1-500		1000-2000		varies		HPLC-UV	FLT 225-7 ‡ 79 / SP 225-27 or / FLT 225-702 ‡ 79 / CST 225-4 86 / IOM 225-76A 92
4,4'-Methylenedianiline (MDA)		NIOSH 5029		LFC		480		1000		8		HPLC-UV	CF/CST 225-9004 61 / C/HLD 225-1 87
4,4'-Methylenedianiline (MDA)		OSHA 57	1240			100		1000		100		GC-ECD	CF/CST 225-9004 61 / C/HLD 225-1 87
4,4-Methylenediphenyl isocyanate (MDI)		NIOSH 5522		50 µg/m³	200 µg/m³ (10 min) C	360	20	1000	2000	6	10	HPLC-FD	IMP 225-36-1 59 IT 225-22 59
2-Methylpentane	●	OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-01 35
3-Methylpentane	●	OSHA CSI				5		20		4		GC	ST 226-01 35
Methylphenols *(see Environmental Sampling Guide)*		EPA TO-8											
Methyltetrahydrophthalic anhydride		NON 28				200	20	40	1000	8	20	GC-FID	ST 226-30 35
Methyltin dichloride		NIOSH 5526		0.1 mg/m³		60	60	250	1000	4	60	GC-FPD	ST 226-30-16 35
Methyltin mercaptide (tin, organic compounds [as Sn])		OSHA CSI				480		1000		8		AA-GF	ST 226-30-16 35
Metolachlor		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
Metolachlor		NIOSH 5602				480		1000		8		GC-ECD	ST 226-58 36

Agency standards for OSHA listings represent the OSHA PELs reported in the 29 CFR 1910.1000 Part 1910, Section 1000.

References and abbreviations are found on pages 196-197.

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Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Metribuzin		OSHA PV2044				240		1000		4		GC-FPD	ST 226-30-16 35
Mevinphos (phosdrin)		OSHA CSI		0.1 mg/m³		480	15	1000	1000	8	15	GC-FPD	ST 226-30-16 35
Mineral wool fiber		OSHA CSI				960		2000		8		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Mineral wool fiber (particulates, respirable)		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-01-02 95 CST 225-3LF 86
Mineral wool fiber (particulates, total)		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Mirex		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
MOCAP		OSHA CSI				480		1000		8		GC-FPD	ST 226-30-16 35
Mold spores (in air)						15-150		15000		1-10 min		varies	STC 225-9820 81
Molybdenum (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥		5 mg/m³ (soluble) 10 mg/m³ (insoluble)		5-67		1000-4000		varies		ICP-AES	F/CST 225-3-01 or F/CST 225-803 73 C/HLD 225-1 87
Molybdenum (elements by ICP HNO_3 digestion)		NIOSH 7303		5 mg/m³ (soluble) 10 mg/m³ (insoluble)		0.5-10,000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Molybdenum (elements by ICP HNO_3/$HClO_4$ ashing)		NIOSH 7300	1455	5 mg/m³ (soluble) 10 mg/m³ (insoluble)		6-67		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Molybdenum (elements on wipes)		NIOSH 9102				wipe						ICP-AES	W 225-2414 124 TMP 225-2403 or TMP 225-2415 124
Molybdenum insolubles (as Mo)		OSHA ID 125G		15 mg/m³		480		2000		4		ICP-AES	F/CST 225-3-01 or F/CST 225-3100 77 C/HLD 225-1 87
Molybdenum insolubles (as Mo) (respirable fraction)		OSHA ID 121	1212	15 mg/m³ (total dust)		960		2000		8		GR & AA or GR & AES	F/CST 225-3-01 77 C/HLD 225-1 87 CYC 225-105 94
Molybdenum solubles (as Mo)		OSHA ID 121	1211	5 mg/m³		960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Monensin		OSHA CSI				960		2000		8		CLR	F/CST 225-706 79 C/HLD 225-1 87
Monilia species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Monilia species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Monochloroacetic acid		OSHA CSI				96		200		8		IC	ST 226-47-01 36
Monochloroacetic acid (chloroacetic acid)		NIOSH 2008				48		100		8		IC-ECN	ST 226-47-01 36
Monochlorotoluene (o-chlorotoluene, 1-chloro-2-methyl benzene, OXSOL 10)	●			50								GC-FID	PS 575-001 or PS 575-002 64
Monocrotophos (Azodrin)		OSHA PV2045				480		1000		8		GC-FPD	ST 226-30-16 35
Monocrotophos (organophosphorus pesticides)		NIOSH 5600		0.25 mg/m³		240		1000		4		GC-FPD	ST 226-58 36
Monoethanolamine (2-aminoethanol)		NIOSH 3509		3	6	240		1000		4		IC	IMP 225-36-1 59 IT 225-22 59
Monoethanolamine *(see 2-aminoethanol)*													
Monomethyl aniline		NIOSH 3511		0.5		100		1000		100 min		GC-FID	IMP 225-36-2 59 IT 225-22 59
Monomethyl aniline		OSHA CSI		2		100		1000		100 min		GC-FID	IMP 225-36-2 59 IT 225-22 59
Monomethyl hydrazine		NIOSH 3510		0.04 (120 min)		15		1000		15		VAS	IMP 225-36-2 59 IT 225-22 59
Monomethyl hydrazine		OSHA 20		0.2		4.5		300		15		HPLC-UV	ST 226-42-02 36
Monuron		ASTM D 4861				240-7200		1000-5000		4-24		HPLC-UV	PUF 226-92 42
Morpholine		OSHA PV2123		20		10		100		100 min		GC-FID	ST 226-98 37
Mortierella species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Mortierella species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Mucor (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Mucor (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Mycobacteria		NIOSH 0801				50-300		28,300		varies		GC-FID	BI 225-9611 103
Mycobacterium tuberculosis (airborne)		NIOSH 0900				1920		4000		8		PCR	FLT 225-2705 74 SP 225-27 87 CST 225-3LF 86 C/HLD 225-1 87
Mycotoxins (fungi in air)		NON 48				62.5-375		12500 +		5-30		varies	BS 225-9595 105 VT ◊ 225-9598A 105
Naphtha (coal tar)		NIOSH 1550		100		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Naphtha (coal tar)		OSHA 48		100		3		200		15 min		GC-FID	ST 226-01 35
Naphthalene	●	OSHA 35	1060	10		10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-110 37
Naphthalene (polynuclear aromatic hydrocarbons by GC-MS)	●	ASTM D 6209				350 m³ (max)		225 L/min		1-24		GC-MS	PUF 226-131 43 FLT 225-1821 79
Naphthalene (polynuclear aromatic hydrocarbons by GC)	●	NIOSH 5515				480		2000		4		GC-FID	F/CST 225-1713 74 ST 226-30-04 35 C/HLD 225-1 87
Naphthalene (polynuclear aromatic hydrocarbons by HPLC)	●	NIOSH 5506		10	15	480		2000		4		HPLC-UV	F/CST 225-1713 74 ST 226-30-04 35 C/HLD 225-1 87
1,5-Naphthalene diisocyanate		OSHA PV2046				60		1000		1		HPLC-UV-FD	CF/CST 225-9013 61 C/HLD 225-1 87
1,5-Naphthalene diisocyanate (isocyanates, total)		NIOSH 5525		40 µg/m³	70 µg/m³ (10 min) C	1-500	1-500	1000-2000	1000-2000	varies	varies	HPLC-UV	FLT 225-7 ‡ 79 CST 225-4 86 SP 225-27 or IOM 225-76A 92 FLT 225-702 ‡ 79
Naphthas *(see specific compounds)*		NIOSH 1550		varies		varies		varies		8		GC-FID	ST 226-01 35
beta-Naphthol		OSHA CSI				60		1000		1		HPLC-UV	IMP 225-36-1 59 IT 225-22 59
alpha-Naphthylamine		OSHA 93	1232			100		1000		100 min		GC-ECD	CF/CST 225-9004 61 C/HLD 225-1 87
beta-Naphthylamine		OSHA 93	1232			100		1000		100 min		GC-ECD	CF/CST 225-9004 61 C/HLD 225-1 87
Naphthylamines (alpha- & beta-)		NIOSH 5518				96		200		8		GC-FID	FLT 225-16 79 CST 225-32 87 ST 226-51 36
Naphthylene diisocyanate (NDI) (isocyanates)		NIOSH 5521		40 µg/m³	70 µg/m³ (10 min) C	480	10	1000	1000	8	10	HPLC-ELCHM & HPLC-UV	IMP 225-36-1 59 IT 225-22 59
Naphthylthiourea *(see ANTU)*													
Neurospora species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Neurospora species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Nickel (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥		0.015 mg/m³		5-1000		1000-4000		varies		ICP-AES	F/CST 225-3-01 or F/CST 225-803 73 C/HLD 225-1 87
Nickel (elements by ICP HNO_3 digestion)		NIOSH 7303		0.012 mg/m³		1-50,000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Nickel (elements by ICP HNO_3/$HClO_4$ ashing)		NIOSH 7300	1455	0.15 mg/m³		5-1000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87

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References and abbreviations are found on pages 196-197.

Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	CLG/STEL (ppm)	Vol. (liter) TWA	CLG/STEL	Rate (ml/min) TWA	CLG/STEL	Time TWA (hrs)	CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Nickel (elements on wipes)		NIOSH 9102				wipe						ICP-AES	W 225-2414 124 TMP 225-2415 124 TMP 225-2403 or
Nickel (metal & insoluble compounds as Ni)		OSHA ID 125G		1 mg/m³		480		2000		4		ICP-AES	F/CST 225-3-01 or C/HLD 225-1 87 F/CST 225-3100 77
Nickel (metal, soluble, & insoluble compounds as Ni)		OSHA ID 121	1044	1 mg/m³		960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Nickel (soluble compounds as Ni)		OSHA ID 121	1197	1 mg/m³		960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Nickel (soluble compounds as Ni)		OSHA ID 125G		1 mg/m³		480		2000		4		ICP-AES	F/CST 225-3-01 or C/HLD 225-1 87 F/CST 225-3100 77
Nickel carbonyl		NIOSH 6007		0.001		72		150		8		AA-GF	ST NA SKC F/CST 225-3-01 77
Nickel carbonyl		OSHA CSI		0.001		480		1000		8		AA-GF	F/CST 225-709 79 IMP 225-36-2 59 C/HLD 225-1 87 IT 225-22 59
Nicotine		NIOSH 2544		0.5 mg/m³		360		1000		6		GC-NPD	ST 226-30-04 35
Nicotine		NIOSH 2551		0.5 mg/m³		480		1000		8		GC-NPD	ST 226-93 37
Nicotine		NON 19				120		1000		2		GC	ST 226-93 37
Nicotine		NON 49				90-720		1500		1- 8		GC-NSD	ST 226-170 38
Nicotine & 3-ethenylpyridine		ASTM D 5075	1427			varies		1500		varies		GC-NPD	ST 226-93 37
Nigrospora species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Nigrospora species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Niobium (elements by ICP HNO_3 digestion)		NIOSH 7303		0.012 mg/m³		0.1-3300		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Nitric acid	●	OSHA ID 165SG		2		96	7.5	200	500	8	15	IC	ST 226-10-03 35
Nitric acid (acids, inorganic)	●	NIOSH 7903	1016	2	4	48	3	200	200	4	15	IC	ST 226-10-03 35
Nitric oxide		OSHA ID 190		25		6		25		4		IC	ST 226-40 36
Nitric oxide & nitrogen dioxide		NIOSH 6014	1390	25 (NO)	1 (NO2)	1.5-6		25		1-4		VAS	ST 226-40 36
5-Nitro-2-furaldehyde semicarbazone		OSHA CSI				240		1000		24 min		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
p-Nitroaniline		NIOSH 5033		3 mg/m³		240		1000		4		HPLC-UV	F/CST 225-3-01 77 C/HLD 225-1 87
p-Nitroaniline		OSHA CSI		1 mg/m³		90		1500		1		HPLC-UV	F/CST 225-3-01 77 C/HLD 225-1 87
Nitrobenzene	●	NIOSH 2005		1		48		100		8		GC-FID	ST 226-10 35
Nitrobenzene	●	NIOSH 2017		1		24		200		2		GC-FID	CF/CST 225-9004 61 ST 226-15 35
4-Nitrobiphenyl		OSHA CSI				240		500		8		GC-FID	ST 226-30-16 35
p-Nitrochlorobenzene		OSHA CSI		1 mg/m³		150		1000		2.5		GC-FID	ST 226-10 35
p-Nitrochlorobenzene (nitrobenzenes)		NIOSH 2005		0.1		96		200		8		GC-FID	ST 226-10 35
Nitrochloroform		NON 51		0.1		144		100		24		GC-MSD	ST 226-175 38
Nitrochloromethane		NON 51		0.1		144		100		24		GC-MSD	ST 226-175 38
4-Nitrodiphenyl		OSHA PV2082				240		500		8		GC-FID	ST 226-30-16 35
Nitroethane		NIOSH 2526		100		2.4		20		2		GC-FID	ST 226-3002A 39
Nitrofurazone		OSHA PV2069				240		1000		4		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Nitrogen dioxide	●	NIOSH 6014			1 (NO_2)	1.5-6		25-200		varies		VAS	ST 226-40-02 36
Nitrogen dioxide	●	OSHA ID 182	1406		5 (C)		3		200		15	IC	ST 226-40 or ST 226-40-02 36
Nitrogen dioxide & nitric oxide		NIOSH 6014	1390	25 (NO)	1 (NO_2)	1.5-6		25		1-4		VAS	ST 226-40 36
Nitrogen dioxide & nitric oxide		NON 11					0.75		50		15	CLR	ST 226-40 36
Nitrogen dioxide & nitric oxide		OSHA ID 182	1389	25 (NO)	5 (NO_2)	6	3	25	200	4	15	IC	ST 226-40 36
Nitroglycerin		NIOSH 2507			0.1 mg/m³		3		200		15	GC-ECD	ST 226-35-03 36
Nitroglycerin		OSHA 43			0.1 mg/m³		15		1000		15	HPLC	ST 226-35-03 36
Nitromethane		NIOSH 2527				2.4		20		2		GC-NSD	ST 226-111A 37
Nitromethane		OSHA CSI		100		3		50		1		GC-NPD	ST 226-111A 37
p-Nitrophenol		OSHA CSI				100		1000		100 min		HPLC-UV	IMP 225-36-1 59 IT 225-22 59
1-Nitropropane		OSHA 46		25		3		100		30 min		GC-FID	ST 226-93 37
2-Nitropropane		NIOSH 2528		LFC		2		20		1.5		GC-FID	ST 226-110 37
2-Nitropropane		OSHA 46		25		3		100		30 min		GC-FID	ST 226-93 37
1-Nitropyrene		OSHA CSI				960		2000		8		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
1-Nitropyrene in diesel particulates		NIOSH 2560				480-960		1000-2000		varies		GC-NCD	FLT 225-7 79 SPC 225-23 87 SP 225-27 87
N-Nitrosodiethanolamine		OSHA 31				480		2000		4		GC-TEA	F/CST 225-706 79 C/HLD 225-1 87
N-Nitrosodiphenylamine		OSHA 23				240		1000		4		HPLC-UV	IMP 225-36-2 59 IT 225-22 59
Nitrotoluene (m-isomer)		OSHA CSI		5		30		200		2.5		GC-FID	ST 226-10 35
m-Nitrotoluene (nitroaromatic compounds)		NIOSH 2005		2 ppm		96		200		8		GC-FID	ST 226-10 35
o-Nitrotoluene (nitroaromatic compounds)		NIOSH 2005		2 ppm		96		200		8		GC-FID	ST 226-10 35
p-Nitrotoluene (nitroaromatic compounds)		NIOSH 2005		2 ppm		96		200		8		GC-FID	ST 226-10 35
Nitrotoluene (nitrobenzenes)		NIOSH 2005		2 ppm		96		200		8		GC-FID	ST 226-10 35
Nitrous oxide	●	NIOSH 6600	1028	25		3		100-4000		varies		P IR	SB 231-05 51
Non-sporulating fungi		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Non-sporulating fungi		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
trans-Nonachlor		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
Nonane	●	OSHA CSI				3		50		1		GC-FID	ST 226-01 35
n-Nonane (hydrocarbons, BP 36 to 216 C)	●	NIOSH 1500		200		4		10-200		varies		GC-FID	ST 226-01 35
Nonpolar organic compounds		NON 38		varies		varies				varies		GC	PUF 226-129 43
Nonyl alcohol	●	OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Nonylphenol		OSHA CSI				24		100		4		HPLC-UV	ST 226-95 37
Norethindrone		OSHA PV2070				480		2000		4		HPLC-UV	F/CST 225-802 73 C/HLD 225-1 87
Nuisance dust (particulates, respirable)		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 CYC 225-01-02 95 C/HLD 225-1 87 CST 225-3LF 86
Nuisance dust (particulates, total)		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 CST 225-2LF 86 C/HLD 225-1 87

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References and abbreviations are found on pages 196-197.

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Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Nuisance dust *(see dust, respirable nuisance)*													
Octachloronaphthalene		OSHA CSI		0.1 mg/m³		30	15	1000	1000	0.5	15	GC-ECD	F/CST 225-3-01 77 C/HLD 225-1 87
Octadecanol		OSHA CSI				10		100		100 min		GC-FID	ST 226-01 35
Octane	●	OSHA 07	1141	500		5	3	20	200	4	15	GC-FID	ST 226-01 35
n-Octane	●	OSHA PV2138		500		4		50		80 min		GC-FID	ST 226-01 35
n-Octane (hydrocarbons, BP 36 to 216 C)	●	NIOSH 1500		75	385	4	4	0-200	0-200	varies	varies	GC-FID	ST 226-01 35
1-Octanethiol		NIOSH 2510			0.5 (15 min)		3		200		15	GC-FPDS	ST 226-35-03 36
di-n-Octyl phthalate (DNOP)		OSHA 104				240		1000		4		GC-FID	ST 226-56 36
Oil mist (mineral)		NIOSH 5026	1526	5 mg/m³	10 mg/m³	480	30	1000	2000	8	15	IR	F/CST 225-3-01 or 87 C/HLD 225-1 F/CST 225-802 73
Oil mist (mineral)		OSHA ID 128		5 mg/m³		960		2000		8		FLUOR	FLT 225-8-01 73 CST 225-2LF C/HLD 225-1 86 87
Oil mist (mineral)		OSHA ID 178SG		5 mg/m³		960		2000		8		GR & IR	FLT 225-8-01 73 CST 225-2LF C/HLD 225-1 86 87
Oil mist (total aerosol)		NON 46		5 mg/m³		varies		2000		varies		GR	IOM 225-70A 92 FLT 225-8-04 73
Oil mist (vegetable) *(see dust, total & respirable nuisance)*													
Oil of vitriol (acids, inorganic)		NIOSH 7903	1016	1 mg/m³		48		200		4		IC	ST 226-10-03 35
Organic vapors (charcoal tube method)		ASTM D 3686				varies	varies	varies	varies	varies	varies	GC	ST 226-01 35
Organic vapors (diffusive sampler method)		ASTM D 4597				varies	varies	varies	varies	varies	varies	GC	PS 575-001 or 64 PS 575-003 PS 575-002 or
Organonitrogen pesticides *(see specific compounds)*		NIOSH 5601				240		1000		4		HPLC-UV	ST 226-58 or ST 226-30-16 35
Organophosphorus pesticides *(see specific compounds)*		NIOSH 5600		varies		varies		varies		8		GC-FPD	ST 226-58 36
Organotin compounds as Sn *(see specific compounds)*		NIOSH 5504		0.1 mg/m³		480		1000		8		HPLC & AA-GF	ST 226-30 35 C/HLD 225-1 87 F/CST 225-709 79
Organotin compounds as Sn *(see specific compounds)*		NIOSH 5526		0.1 mg/m³		60	60	250	1000	4	60	GC-FPD	ST 226-30-16 35
Orthene (acephate)		OSHA CSI				240		1000		4		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Oryzalin		OSHA CSI				120		1000		2		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87 IMP 225-36-1 59 IT 225-22 59
Osmium tetroxide (as Os)		OSHA 125G		0.002		480	15	1000	1000	8	15	ICP	F/CST 225-3-01 77 IT 225-22 59 IMP 225-36-1 59
Oxalic acid		OSHA PV2115		1 mg/m³		100		1000		100 min		IC	F/CST 225-3-01 77 C/HLD 225-1 87
Oxamyl (organonitrogen pesticides)		NIOSH 5601				240		1000		4		HPLC-UV	ST 226-58 or ST 226-30-16 35
Oxamyl (Vydate)		OSHA CSI				60		1000		1		HPLC	ST 226-30-16 35
Oxychlordane		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
Oxydemeton methyl		OSHA CSI				480		1000		8		GC-FPD	ST 226-30-16 35
Oxygen		OSHA CSI										DET TB or DRI	DT 800-28081 or DT 810-31B
Ozone	●	OSHA CSI		0.1								DET TB	DT 800-33181 or DT 800-21001 or DT 810-18L
Ozone	●	OSHA ID-214		0.1		90		500		3		IC	CF/CST 225-9014 61 C/HLD 225-1 87 ST Special order Σ
Paecilomyces species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Paecilomyces species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
PAHs (polynuclear aromatic hydrocarbons by GC-MS, *see specific compounds*)		ASTM D 6209				350 m³ (max)		225 L/min		1-24		GC-MS	PUF 226-131 43 FLT 225-1821 79
PAHs (polynuclear aromatic hydrocarbons by GC, *see specific compounds*)		NIOSH 5515	1464			480		2000		4		GC-FID	F/CST 225-1713 74 C/HLD 225-1 87 ST 226-30-04 35
PAHs (polynuclear aromatic hydrocarbons by HPLC, *see specific compounds*)		NIOSH 5506	1464			480		2000		4		HPLC-UV	F/CST 225-1713 74 C/HLD 225-1 87 ST 226-30-04 35
Palladium (elements by ICP HNO_3 digestion)		NIOSH 7303				0.1-3.300		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Palladium *(see dust, total nuisance)*		OSHA CSI											
Pancreatin		OSHA CSI				480		2000		4		IRA	F/CST 225-1713 74 C/HLD 225-1 87
Papain		OSHA CSI				60,000		1000 L/min		1		GC-FID	FLT 225-7-07 79
Paper fiber (cellulose) (particulates, respirable)		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 CYC 225-01-02 95 C/HLD 225-1 87 CST 225-3LF 86
Paper fiber (cellulose) (particulates, total)		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 CST 225-2LF C/HLD 225-1 86 87
PAPI		OSHA CSI				15		1000		15 min		HPLC-UV	FLT 225-7 ‡ 79 C/HLD 225-1 87 CST 225-3LF 86
Paraffin wax fume		OSHA PV2047				100		1000		100 min		GC-FID	F/CST 225-706 79 C/HLD 225-1 87
Paraquat		NIOSH 5003		0.1 mg/m³		480		1000		8		HPLC-UV	FLT 225-17-01 74 C/HLD 225-1 87 CST 225-2LF 86
Paraquat (respirable dust)		OSHA CSI		0.5 mg/m³		960		4000		4		HPLC-UV	FLT 225-17-01 74 C/HLD 225-1 87 CST 225-2LF 86
Parathion		OSHA 62	1398	0.1 mg/m³		480		1000		8		GC-FPD	ST 226-30-16 35
Parathion (organophosphorus pesticides)		NIOSH 5600		0.05 mg/m³		240		1000		4		GC-FPD	ST 226-58 36
Particulates not otherwise regulated (total dust)		OSHA CSI		15 mg/m³		720		1500		8		GR	FLT 225-8-01 73 CST 225-2LF C/HLD 225-1 86 87
Particulates not otherwise regulated, respirable		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 CYC 225-01-02 95 C/HLD 225-1 87 CST 225-3LF 86
Particulates not otherwise regulated, respirable fraction		OSHA CSI		5 mg/m³		varies		varies		varies		GR	FLT 225-8-01 73 CYC 225-105 94 C/HLD 225-1 87 CST 225-3LF 86
Particulates, inorganic (bioaerosols)						15-150		15000		1-10 min		varies	STC 225-9820 81
Particulates, respirable		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 CYC 225-01-02 95 C/HLD 225-1 87 CST 225-3LF 86
Particulates, total *(see specific compounds)*		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 CST 225-2LF C/HLD 225-1 86 87

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Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	CLG/STEL (ppm)	Vol. (liter) TWA	CLG/STEL	Rate (ml/min) TWA	CLG/STEL	Time TWA (hrs)	CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
PCBs (42% Cl) *(see polychlorobiphenyls)*		NIOSH 5503											
PCBs (54% Cl) *(see polychlorobiphenyls)*		NIOSH 5503											
PCBs (polychlorinated biphenyls) *(see Environmental Sampling Guide)*		EPA TO-4A											
Penicillium species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Penicillium species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Pentaborane		OSHA CSI		0.005		480	15	1000	1000	8	15	ICP	IT 225-22 59 IMP 225-36-2 59
Pentac (bis [pentachloro-2,4-cyclopentadien-1-yl])		OSHA CSI				120		1000		2		HPLC-UV	FLT 225-9 76 CST 225-3LF 86 IMP 225-36-1 59 IT 225-22 59 C/HLD 225-1 87
Pentachlorobenzene		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
Pentachlorobenzene (polychlorobenzenes)		NIOSH 5517				12		25		8		GC-ECD	FLT 225-17-03 74 CST Special ST 226-30-04 35 order
Pentachloroethane		NIOSH 2517				10		20		8		GC-ECD	ST 226-59-04 36
Pentachloroethane		OSHA CSI				10		20		8		GC-ECD	ST 226-59-04 36
Pentachloronaphthalene		OSHA CSI		0.5 mg/m³		90		1000		1.5		GC-ECD	ST 226-30-16 35
Pentachlorophenol		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
Pentachlorophenol		NIOSH 5512		0.5 mg/m³		480		1000		8		HPLC-UV	CST 225-3LF 86 SCN 225-26 87 IMP 225-36-2 59 IT 225-22 59 FLT 225-5 76
Pentachlorophenol		OSHA 39		0.5 mg/m³		48		200		4		HPLC-UV	ST 226-97 37
2,3-Pentadione		OSHA 1016				10	3	50	200 (min)	200	15	GC-FID	ST 226-183 38
Pentaerythritol (particulates, respirable)		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-01-02 95 CST 225-3LF 86
Pentaerythritol (particulates, total)		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Pentaerythritol (respirable dust)		OSHA CSI		5 mg/m³		varies		varies		varies		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-105 94 CST 225-3LF 86
Pentaerythritol (total dust)		OSHA CSI		15 mg/m³		960		2000		8		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-3LF 86
Pentamethyldiethylenetriamine		OSHA CSI				480		1000		8		GC-NPD	IMP 225-36-1 59 IT 225-22 59
Pentamidine isethionate		NIOSH 5032				960		2000		8		HPLC-FD	CST 225-4 86 FLT 225-8-01 73 C/HLD 225-1 87
Pentane	●	OSHA 07	1140	1000		2	0.75	20	50	1.6	15	GC-FID	ST 226-01 35
n-Pentane (hydrocarbons, BP 36 to 216 C)	●	NIOSH 1500		120	610	4	4	10-200	10-200	varies	varies	GC-FID	ST 226-01 35
2-Pentanone (ketones I)		NIOSH 2555				1-10		10-200		varies		GC-FID	ST NA SKC
2-Pentanone (methyl propyl ketone)	●	OSHA 07	1139	200		10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
2-Pentanone (methyl propyl ketone) (ketones I)	●	NIOSH 1300		150		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
1-Pentene	●	OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Perchloric acid		OSHA ID 115SG				120		500		4		CLR	IMP 225-36-2 59 IT 225-22 59
Perchloroethylene (tetrachloroethylene)	●	OSHA 1001		100	200 (C)	12	0.75	50	50	4	5	GC-FID	ST 226-01 35
Perchloroethylene (tetrachloroethylene)	●	OSHA 1001		100	200 (C)			13.06		8	5	GC-FID	PS 575-002 64
Perchloroethylene (tetrachloroethylene) (hydrocarbons, halogenated)	●	NIOSH 1003		LFC		3		10-200		varies		GC-FID	ST 226-01 35
Perchloroethylene (tetrachloroethylene) (portable GC)		NIOSH 3704		LFC		1		20-5000		varies		P GC	SB 232-01 50
Perchloryl fluoride		OSHA CSI		3		240	15	1000	1000	4	15	ISE	IMP 225-36-2 59 IT 225-22 59
Perlite (< 1% Quartz) *(see dust, total & respirable nuisance)*													
cis-Permethrin		ASTM D 4861				240-7200		1000-5000		4-24		HPLC-UV	PUF 226-92 42
trans-Permethrin		ASTM D 4861				240-7200		1000-5000		4-24		HPLC-UV	PUF 226-92 42
Peroxyacetic acid & hydrogen peroxide		NON 57					15		1000		15	MAS/HPLC-UV	CF/CST 225-9030 61 ST 226-193 38
Pesticides *(see Environmental Sampling Guide)*		EPA IP-8											
Pesticides *(see Environmental Sampling Guide)*		EPA TO-10A											
Pesticides, carbamate		ASTM D 4861				240-7200		1000-5000		4-24		HPLC-UV	PUF 226-92 42
Pesticides, organochlorine		ASTM D 4861	1253			240-7200		1000-5000		4-24		varies	PUF 226-92 or PUF 226-124 42
Pesticides, organochlorine *(see Environmental Sampling Guide)*		EPA TO-4A											
Pesticides, organonitrogen *(see specific compounds)*		NIOSH 5601				240		1000		4		HPLC-UV	ST 226-58 or ST 226-30-16 35
Pesticides, organophosphorus		ASTM D 4861	1253			240-7200		1000-5000		4-24		varies	PUF 226-92 or PUF 226-124 42
Pesticides, pyrethrin		ASTM D 4861				240- 7200		1000-5000		4-24		HPLC-UV	PUF 226-92 42
Pesticides, triazine		ASTM D 4861				240-7200		1000-5000		4-24		HPLC-UV or GC-ECD	PUF 226-92 42
Petroleum distillate (naphthas)		NIOSH 1550		350 mg/m³	1800 mg/m³	3.6	1.5	20	100	3	15	GC-FID	ST 226-01 35
Petroleum distillate fractions (PDF)		OSHA 48		500		3		20		2.5		GC-FID	ST 226-01 35
Petroleum ether (benzin) (naphthas)		NIOSH 1550		350 mg/m³	1800 mg/m³	3	1.5	20(50)	100	2.5(1)	15	GC-FID	ST 226-01 35
Petroleum naphtha (naphthas)		NIOSH 1550		350 mg/m³	1800 mg/m³	3	1.5	20(50)	100	2.5(1)	15	GC-FID	ST 226-01 35
Peziza species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Peziza species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Phenanthrene		OSHA 58				960		2000		8		GR & HPLC-FD, or GR & HPLC-UV	FLT 225-7 79 CST 225-2LF 86 C/HLD 225-1 87
Phenanthrene (polynuclear aromatic hydrocarbons by GC-MS)		ASTM D 6209				350 m³ (max)		225 L/min		1-24		GC-MS	PUF 226-131 43 FLT 225-1821 79
Phenanthrene (polynuclear aromatic hydrocarbons by GC)		NIOSH 5515				480		2000		4		GC-FID	F/CST 225-1713 74 ST 226-30-04 35 C/HLD 225-1 87

Agency standards for OSHA listings represent the OSHA PELs reported in the 29 CFR 1910.1000 Part 1910, Section 1000.

References and abbreviations are found on pages 196-197.

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Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Phenanthrene (polynuclear aromatic hydrocarbons by HPLC)		NIOSH 5506				480		2000		4		HPLC-UV	F/CST 225-1713 74 ST 226-30-04 35 C/HLD 225-1 87
Phenol	●	OSHA 32	1019	5		24		100		4		HPLC-UV	ST 226-95 37
Phenol (cresols)	●	NIOSH 2546		5	15.6 (15 min)	24	3	100	200	4	15	GC-FID	ST 226-95 37
Phenol *(see Environmental Sampling Guide)*		EPA TO-8											
Phenolics (screening)		NIOSH 2549				5		20		4		GC-MS	ST 226-330 39
Phenothiazine		OSHA PV2048				100		1000		1		GC-NPD	F/CST 225-706 79 C/HLD 225-1 87
2-Phenoxyethanol		OSHA CSI				10		200		50 min		GC-FID	ST 226-01 35
2-Phenoxyethyl acrylate		OSHA CSI				24		100		4		GC-FID	ST 226-22 35
1-Pheny-1-cyclohexene		OSHA CSI				10		200		50 min		GC-FID	ST 226-01 35
Phenyl ether	●	NIOSH 1617		1		48		100		8		GC-FID	ST 226-01 35
Phenyl ether	●	OSHA 07	1138	1		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Phenyl ether	●	OSHA PV2022		1		20		200		100 min		GC-FID	ST 226-95 37
Phenyl ether-biphenyl mix		NIOSH 2013		1		24		50		8		GC-FID	ST 226-10 35
Phenyl ether-biphenyl mix		OSHA CSI		1		10		20(50)		8(3.3)		GC-FID	ST 226-95 37
Phenyl glycidyl ether	●	NIOSH 1619			1 (15 min)		80		1000		80	GC-FID	ST 226-01 35
Phenyl glycidyl ether	●	OSHA 07	1137	10		48		100		8		GC-FID	ST 226-01 35
Phenyl hydrazine		NIOSH 3518			0.14 (120 min)		120		1000		120	VAS	IMP 225-36-2 59 IT 225-22 59
Phenyl hydrazine		OSHA CSI		5		100	15	1000	1000	100 min	15	CLR	IMP 225-36-2 59 IT 225-22 59
Phenyl mercaptan		OSHA PV2075				20		200		100 min		GC-FID	CF/CST 225-9007 61 C/HLD 225-1 87
N-Phenyl-1-naphthylamine		OSHA 96				240		2000		4		HPLC-FD	FLT 225-703 ‡ 79 CST 225-309 86 C/HLD 225-1 87
N-Phenyl-2-naphthylamine		OSHA 96				240		1000		4		HPLC-FD	FLT 225-703 ‡ 79 CST 225-309 86 C/HLD 225-1 87
N-Phenyl-2-naphthylamine		OSHA CSI										W	W 225-2401A 124
4-Phenylcyclohexene		OSHA CSI				10		200		50 min		GC-FID	ST 226-01 35
m-Phenylenediamine		OSHA 87	1231			100		1000		100 min		HPLC-UV	CF/CST 225-9004 61 C/HLD 225-1 87
o-Phenylenediamine		OSHA 87	1231			100		1000		100 min		HPLC-UV	CF/CST 225-9004 61 C/HLD 225-1 87
p-Phenylenediamine		OSHA 87	1231	0.1 mg/m³		100		1000		100 min		HPLC-UV	CF/CST 225-9004 61 C/HLD 225-1 87
Phenyloxirane *(see styrene oxide)*		OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-35 35
o-Phenylphenol		ASTM D 4861				240-7200		1000-5000		4-24		HPLC-UV	PUF 226-92 42
o-Phenylphenol		OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-35 35
Phoma species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Phoma species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Phorate		ASTM D 4861				240-7200		1000-5000		4-24		GC-NPD	PUF 226-92 42
Phorate (organophosphorus pesticides)		NIOSH 5600		0.05 mg/m³	0.2 mg/m³	240		1000		4		GC-FPD	ST 226-58 36
Phorate (Thimet)		OSHA CSI				480	15	1000	1000	8	15	GC-FPD	ST 226-30-16 35
Phosdrin (mevinphos)		OSHA CSI		0.1 mg/m³		480	15	1000	1000	8	15	GC-FPD	ST 226-30-16 35
Phosdrin (mevinphos) (organophosphorus pesticides)		NIOSH 5600		0.01	0.03	120	15	1000	1000	2	15	GC-FPD	ST 226-58 36
Phosgene		OSHA 61		0.1		240		1000		4		GC-NPD	ST 226-117 37
Phosgene *(see Environmental Sampling Guide)*		EPA TO-6											
Phosgene & chloroformates		NON 40				24		50		8		GC-FPD	ST 226-153 38
Phosmet (Imidan)		OSHA CSI				120		1000		2		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Phosphine		NIOSH 6002		0.3	1	12	3	100	200	8	15	UV-VAS	ST 226-165A †† 38
Phosphine		OSHA 1003	1698	0.3		240	30	1000	2000	4	15	ICP-AES	CF/CST 225-9018 †† 61 C/HLD 225-1 87
Phosphoric acid		OSHA ID 111	1466	1 mg/m³		960	30	2000	2000	8	15	IC	F/CST 225-3-01 77 C/HLD 225-1 87
Phosphoric acid		OSHA ID 165SG		1 mg/m³		960	30	2000	2000	8	15	IC	ST 226-10-03 35
o-Phosphoric acid		NIOSH 7903	1016	1 mg/m³	3 mg/m³	48	3	200	200	4	15	IC	ST 226-10-03 35
m-Phosphoric acid (acids, inorganic)		NIOSH 7903	1016	1 mg/m³	3 mg/m³	48	3	200	200	4	15	IC	ST 226-10-03 35
Phosphorous (elements by ICP HNO_3 digestion)		NIOSH 7303		0.1 mg/m³		250-500,000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Phosphorus		NIOSH 7905		0.1 mg/m³		12		200		1		GC-FPD	ST 226-35-03 36
Phosphorus (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥		0.1 mg/m³		25-2000		1000-4000		varies		ICP-AES	F/CST 225-3-01 or F/CST 225-803 73 C/HLD 225-1 87
Phosphorus (elements by ICP HNO_3/$HClO_4$ ashing)		NIOSH 7300	1455	0.1 mg/m³		25-200		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Phosphorus (elements on wipes)		NIOSH 9102				wipe						ICP-AES	W 225-2414 124 TMP 225-2403 or TMP 225-2415 124
Phosphorus (yellow)		OSHA CSI		0.1 mg/m³		96		200		8		GC-FPD	ST 226-35-03 36
Phosphorus oxychloride		OSHA CSI				240		1000		4		IC	IMP 225-36-2 59 IT 225-22 59
Phosphorus pentachloride		OSHA CSI		1 mg/m³		48		200		4		CLR	F/CST 225-803 73 IMP 225-36-2 59 IT 225-22 59 SCN 225-26 87
Phosphorus pentasulfide		OSHA ID 128SG		1 mg/m³		960	30	2000	2000	8	15	IC	F/CST 225-802 73 C/HLD 225-1 87
Phosphorus pentoxide		OSHA ID 111				480		1000		8		IC	F/CST 225-3-01 77 C/HLD 225-1 87
Phosphorus trichloride		NIOSH 6402		0.2	0.5	24		200		2		VAS	IMP 225-36-2 59 IT 225-22 59
Phosphorus trichloride		OSHA CSI		0.5		96	3	200	200	8	15	CLR	IMP 225-36-2 59 IT 225-22 59
Phosvel		OSHA CSI				480		1000		8		GC-FPD	ST 226-30-16 35
Phthalates *(see specific compounds)*													
Phthalic acid		OSHA CSI				10		200		50 min		HPLC	ST 226-01 35
Phthalic anhydride		OSHA 90		2		75		1000		1.25		HPLC-UV	FLT 225-7 ‡ 79 CST 225-3LF 86 C/HLD 225-1 87
m-Phthalodinitrile		OSHA CSI				20		200		100 min		GC-NPD	ST 226-01 35
Picloram (tordon) (total dust)		OSHA PV2049		15 mg/m³		60		1000		1		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-3LF 86
Picloram (tordon) (respirable dust)		OSHA CSI		5 mg/m³		varies		varies		varies		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-105 94 CST 225-3LF 86
Picric acid		OSHA CSI		0.1 mg/m³		180		1500		2		HPLC-UV	F/CST 225-3-01 77 C/HLD 225-1 87

Agency standards for OSHA listings represent the OSHA PELs reported in the 29 CFR 1910.1000 Part 1910, Section 1000.

References and abbreviations are found on pages 196-197.

Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Pindone		OSHA CSI		0.1 mg/m³		180		1000		3		HPLC-UV	FLT 225-17-01 74 CST 225-2LF 86; ST 226-35-03 36 C/HLD 225-1 87
alpha-Pinene	●	OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-01 35
beta-Pinene	●	OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-01 35
alpha-Pinene (terpenes)	●	NIOSH 1552				24		50		8		GC-FID	ST 226-01 35
beta-Pinene (terpenes)	●	NIOSH 1552				24		50		8		GC-FID	ST 226-01 35
Piperazine dihydrochloride		OSHA CSI				96		200		8		GC-NPD	F/CST 225-709 79 C/HLD 225-1 87
Piperidine		OSHA CSI				6		200		30 min		GC-FID	ST 226-01 35
Piperonyl butoxide		OSHA PV2110				30		1000		30 min		HPLC-UV	ST 226-30-16 35
Pipron		OSHA CSI				90		1000		1.5		GC-ECD	F/CST 225-706 79 C/HLD 225-1 87; IMP 225-36-1 59 IT 225-22 59
Pirimiphos methyl		OSHA PV2071				120		1000		2		GC-ECD	ST 226-30-16 35
Pithomyces species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Pithomyces species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Plaster of Paris (particulates, respirable)		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 C/HLD 225-1 87; CYC 225-01-02 95 CST 225-3LF 86
Plaster of Paris (particulates, total)		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 C/HLD 225-1 87; CST 225-2LF 86
Plaster of Paris *(see dust, respirable nuisance)*		OSHA CSI											
Platinum		OSHA ID 130SG				90		1000		1.5		AA	F/CST 225-3-01 77 C/HLD 225-1 87
Platinum (elements by ICP HNO_3 digestion)		NIOSH 7303				200-25,000,000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Platinum (as Pt), metal		OSHA CSI				960		2000		8		AA-GF	F/CST 225-3-01 77 C/HLD 225-1 87
Platinum (as Pt), metal		OSHA ID 121				960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Platinum (as Pt), soluble salts		OSHA ID 121		2 µg/m³		960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
PM2.5 *(see Environmental Sampling Guide)*		EPA IP-10A											
PNAs (polynuclear aromatic hydrocarbons by GC, *see specific compounds*)		NIOSH 5515	1464			480		2000		4		GC-FID	F/CST 225-1713 74 ST 226-30-04 35; C/HLD 225-1 87
PNAs by HPLC *(see specific compounds)*		NIOSH 5506	1464			480		2000		4		HPLC-UV	F/CST 225-1713 74 ST 226-30-04 35; C/HLD 225-1 87
PNAs selected		OSHA 58				960		2000		8		GR & HPLC-FD, or GR & HPLC-UV	FLT 225-7 79 CST 225-2LF 86; C/HLD 225-1 87
Pollen (in air)						15-150		15000		1-10 min		varies	STC 225-9820 81
Pollen (in air)		NON 48				62.5-375		12500 +		5-30		varies	BS 225-9595 105 VT ◊ 225-9598A 105
Polychlorinated biphenyls		ASTM D 4861	1252			240-7200		1000-5000		4-24		varies	PUF 226-92 or PUF 226-124 42
Polychlorinated biphenyls		NIOSH 5503		0.001 mg/m³ (10 hr)		48		100(200)		8(4)		GC-ECD	FLT 225-16 79 CST 225-32 87; ST 226-39 36
Polychlorinated biphenyls		OSHA CSI				60		1000		1		GC-ECD	ST 226-30-16 35
Polychlorobenzenes *(see specific compounds)*		NIOSH 5517		varies		varies		varies		8		GC-ECD	FLT 225-17-03 74 ST 226-30-04 35; CST Special order C/HLD 225-1 87
Polychlorobiphenyls (42% Cl)		NIOSH 5503		0.001 mg/m³ (10 hr)		48		100(200)		8(4)		GC-ECD	FLT 225-16 79 CST 225-32 87; ST 226-39 36
Polychlorobiphenyls (54% Cl)		NIOSH 5503		0.001 mg/m³ (10 hr)		48		100(200)		8(4)		GC-ECD	FLT 225-16 79 CST 225-32 87; ST 226-39 36
Polycyclic aromatic compounds (PACs), total		NIOSH 5800				960	30	2000	2000	8	15	FLUOR	F/CST 225-1713 74 ST 226-30-04 35; C/HLD 225-1 87
Polyfunctional aziridine		OSHA CSI				100		1000		100 min		GC-FID	ST 226-57 36
Polynuclear aromatic hydrocarbons (polynuclear aromatic hydrocarbons by GC-MS)		ASTM D 6209		varies		350 m³ (max)		225 L/min		4-24		GC-MS	PUF 226-131 43 FLT 225-1821 79
Polynuclear aromatic hydrocarbons by HPLC *(see specific compounds)*		NIOSH 5506	1464	varies		480		2000		4		HPLC-UV	F/CST 225-1713 74 ST 226-30-04 35; C/HLD 225-1 87
Polynuclear aromatic hydrocarbons (polynuclear aromatic hydrocarbons by GC, *see specific compounds*)		NIOSH 5515	1464	varies		480		2000		4		GC-FID	F/CST 225-1713 74 ST 226-30-04 35; C/HLD 225-1 87
Portland cement (particulates, respirable)		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 C/HLD 225-1 87; CYC 225-01-02 95 CST 225-3LF 86
Portland cement (particulates, total)		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 C/HLD 225-1 87; CST 225-2LF 86
Portland cement (respirable dust)		OSHA ID 142		5 mg/m³		varies		varies		varies		GR & XRD	FLT 225-8-01 73 C/HLD 225-1 87; CYC 225-105 94 CST 225-3LF 86
Portland cement (total dust)		OSHA ID 142		15 mg/m³		960		2000		8		GR & XRD	FLT 225-8-01 73 C/HLD 225-1 87; CST 225-3LF 86
Portland cement (total dust)		OSHA ID 207		15 mg/m³		240		1000		4		XRD	FLT 225-8-01 73 C/HLD 225-1 87; CST 225-3LF 86
Potassium (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥				5-1000		1000-4000		varies		ICP-AES	F/CST 225-3-01 or F/CST 225-803 73; C/HLD 225-1 87
Potassium (elements by ICP HNO_3/$HClO_4$ ashing)		NIOSH 7300	1455			5-1000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Potassium & compounds		OSHA ID 121				960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Potassium chromate (CR(VI))		OSHA ID 215 (V2)	1439	0.005 mg/m³		960		2000		8		IC-UV	F/CST 225-802 Ω 73 C/HLD 225-1 87
Potassium cyanide (cyanides)		NIOSH 7904		5 mg/m³ (10 min)		15		1000		15		ISE	FLT 225-2705 Δ 74 CST 225-2LF 86; IMP 225-36-2 59 IT 225-22 59; C/HLD 225-1 87
Potassium hydroxide (alkaline dust)		NIOSH 7401				960		2000		8		TITRA	FLT 225-17-01 74 CST 225-2LF 86; C/HLD 225-1 87
Potassium hydroxide (as K)		OSHA ID 121	1199			10		2000		5		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Pramitol		OSHA CSI				100		1000		100 min		HPLC-UV	ST 226-30-16 35
Progesterone		OSHA PV2001				60		1000		1		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Propane		OSHA CSI		1000		5		100		50 min		GC-FID	ST NA SKC
1,2,3-Propanetriol trinitrate		OSHA 43				15		1000		15 min		HPLC-UV	ST 226-35-03 36
Propargyl alcohol		OSHA 97				6		50		2		GC-ECD	ST 226-178 38

P

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P

Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Propazine		ASTM D 4861				240-7200		1000-5000		4-24		GC-NPD	PUF 226-92 42
Propham (organonitrogen pesticides)		NIOSH 5601				240		1000		4		HPLC-UV	ST 226-58 or ST 226-30-16 35
Propionaldehyde		ASTM D 5197				varies		500-1200		5 min-24 hrs		HPLC-UV	ST 226-120 ○ or ST 226-119 37
Propionaldehyde (aldehydes, screening)		NIOSH 2539				5		20		4		GC-FID & GC-MS	ST 226-118 37
Propionic acid	●	OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-15 35
Propoxur (Baygon)		ASTM D 4861				240-7200		1000-5000		4-24		HPLC-UV	PUF 226-92 42
Propoxur (Baygon)		OSHA PV2007				60		1000		1		HPLC-UV	ST 226-30-16 35
Propoxur (organonitrogen pesticides)		NIOSH 5601		0.5 mg/m³		240		1000		4		HPLC-UV	ST 226-58 or ST 226-30-16 35
2-Propoxyethanol		OSHA CSI				6		200		30 min		GC-FID	ST 226-01 35
n-Propyl acetate	●	OSHA 07	1136	200		10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
n-Propyl acetate (esters I)	●	NIOSH 1450		200	250	1-10	1-10	10-200	10-200	varies	varies	GC-FID	ST 226-01 35
Propyl alcohol	●	OSHA 07		200		10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
n-Propyl alcohol (alcohols combined)	●	NIOSH 1405		200	250 (skin)	1-10	1-10	10-200	10-200	varies	varies	GC-FID	ST 226-01 35
n-Propyl alcohol (alcohols II)	●	NIOSH 1401		200	250	10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
Propyl bromide	●	OSHA CSI				12		100		2		GC-FID	ST 226-01 35
n-Propyl nitrate		OSHA 07		25	40	48		100		8		GC-FID	ST 226-81A 36
Propyl paraben		OSHA CSI										HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Propylene dichloride (1,2-dichloro propane)	●	ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
Propylene dichloride (1,2-dichloro propane)	●	NIOSH 1013		LFC		3		20		2.5		GC-ECN	ST 226-81A 36
Propylene dichloride (1,2-dichloro propane)	●	OSHA 07		75		10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
Propylene glycol		NIOSH 5523	1403			60		1000		1		GC-FID	ST 226-57 36
Propylene glycol		OSHA PV2051				60	15	1000	1000	1	15	GC-FID	ST 226-57 36
1,2-Propylene glycol dinitrate		OSHA CSI				15		1000		15 min		HPLC	ST 226-35-03 36
Propylene glycol monomethyl ether	●	OSHA CSI				10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
Propylene glycol monomethyl ether (glycol ethers)	●	NIOSH 2554				3-25		100-200		varies		GC-FID	ST 226-81A 36
Propylene glycol monomethyl ether acetate	●	OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Propylene glycol monomethyl ether acetate (glycol ethers)	●	NIOSH 2554				3-25		100-200		varies		GC-FID	ST 226-81A 36
Propylene oxide (1, 2-epoxypropane)	●	NIOSH 1612		LFC		5		20		4.2		GC-FID	ST 226-01 35
Propylene oxide (1, 2-epoxypropane)	●	OSHA 88	1325	100		5	5	100	1000	50 min	5	GC-FID	ST 226-81A 36
Propyleneimine		OSHA CSI		2		48		200		4		HPLC-UV	IMP 225-36-2 59 IT 225-22 59
Pyrene		OSHA 58				960		2000		8		GR & HPLC-FD, or GR & HPLC-UV	FLT 225-7 79 CST 225-2LF 86 C/HLD 225-1 87
Pyrene (polynuclear aromatic hydrocarbons by GC-MS)		ASTM D 6209				350 m³ (max)		225 L/min		1-24		GC-MS	PUF 226-131 43 FLT 225-1821 79
Pyrene (polynuclear aromatic hydrocarbons by GC)		NIOSH 5515				480		2000		4		GC-FID	F/CST 225-1713 74 ST 226-30-04 35 C/HLD 225-1 87
Pyrene (polynuclear aromatic hydrocarbons by HPLC)		NIOSH 5506				480		2000		4		HPLC-FD	F/CST 225-1713 74 ST 226-30-04 35 C/HLD 225-1 87
Pyrethrin pesticides *(see specific compounds)*		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
Pyrethrum		ASTM D 4861				240-7200		1000-5000		4-24		HPLC-UV	PUF 226-92 42
Pyrethrum		NIOSH 5008		5 mg/m³		100		1000		2		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87 SP 225-27 87
Pyrethrum		OSHA 70	1400	5 mg/m³		60		1000		1		GC-ECD	ST 226-30-16 35
Pyridine	●	NIOSH 1613		5		48		100		8		GC-FID	ST 226-01 35
Pyridine	●	OSHA 07	1180	5		48		100		8		GC-FID	ST 226-01 35
Pyridine	●	OSHA PV2295		5		10		100		100 min		GC-FID	ST 226-95 37
1-(2-Pyridyl)piperazine		OSHA CSI										W	W 225-2401A 124
Pyrimethamine		OSHA CSI				10		1000		100 min		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Quartz (respirable) in coal dust, (silica in coal mine dust)		NIOSH 7603		0.05 mg/m³		300-1000		2500		varies		IR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-01-02 95 CST 225-3LF 86
Quartz (silica, crystalline [respirable]) by XRD		NIOSH 7500	1370	0.05 mg/m³		400-1000		2500		varies		XRD	F/CST 225-803 73 CYC 225-01-02 95
Quartz (silica, crystalline by IR)		NIOSH 7602		0.05 mg/m³		400-800		2500		varies		IR	F/CST 225-803 73 C/HLD 225-1 87 CYC 225-01-02 95
Quartz (silica, crystalline by VAS)		NIOSH 7601	1041	0.05 mg/m³		400-800		2500		varies		VAS	F/CST 225-803 73 C/HLD 225-1 87 CYC 225-01-02 95
Quinone		OSHA CSI		0.1		24		100		4		HPLC-UV	ST 226-30-04 35
Rabon		OSHA CSI				480		1000		8		GC-ECD	ST 226-30-16 35
Radon progeny (on dust, in mines)		NON 56				5		2000		5 min		DRI	FLT 225-702 79 CST 225-1107 87
Ramrod (propachlor)		OSHA CSI				120		1000		2		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Resmethrin		ASTM D 4861				240-7200		1000-5000		4-24		HPLC-UV	PUF 226-92 42
Resmethrin		OSHA PV2052				60		1000		1		HPLC-UV	ST 226-30-16 35
Resorcinol		NIOSH 5701		10		120		500		4		GC-FID	ST 226-57 36
Rhizopus species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Rhizopus species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Rhodamine B		OSHA PV2072				240		1000		4		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Rhodium metal fume & dust (as Rh)		OSHA CSI		0.1 mg/m³		960		2000		8		AA-GF	F/CST 225-3-01 77 C/HLD 225-1 87
Rhodium soluble salts (as Rh)		OSHA CSI		1 µg/m³		960		2000		8		AA-GF	F/CST 225-3-01 77 C/HLD 225-1 87
Rhodotorula species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Rhodotorula species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Ribavirin		NIOSH 5027				480		1000		8		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Ronnel		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-92 42
Ronnel		OSHA PV2054		15 mg/m³		60		1000		1		GC-FPD	ST 226-30-16 35
Ronnel (organophosphorus pesticides)		NIOSH 5600		10 mg/m³		60		1000		1		GC-FPD	ST 226-58 36
Rosaniline		OSHA CSI				bulk						HPLC	

Agency standards for OSHA listings represent the OSHA PELs reported in the 29 CFR 1910.1000 Part 1910, Section 1000.

References and abbreviations are found on pages 196-197.

Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Rotenone		NIOSH 5007		5 mg/m³		120		1000		2		HPLC-UV	FLT 225-17-01 74 CST 225-2LF 86 C/HLD 225-1 87
Rotenone (commercial)		OSHA CSI		5 mg/m³		240		2000		2		HPLC-UV	FLT 225-17-01 74 CST 225-2LF 86 C/HLD 225-1 87
Rouge (particulates, respirable)		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-01-02 95 CST 225-3LF 86
Rouge (particulates, total)		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Rouge (respirable dust)		OSHA CSI		5 mg/m³		varies		varies		varies		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-105 94 CST 225-3LF 86
Rouge (total dust)		OSHA CSI		15 mg/m³		960		2000		8		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-3LF 86
Roundup		OSHA CSI				90		1000		1.5		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Rozol		OSHA CSI				120		1000		2		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Rubber solvent (naphthas)		NIOSH 1550		350 mg/m³	1800 mg/m³	10	1.5	20(50)	100	8(3.3)	15	GC-FID	ST 226-01 35
Rubidium		OSHA CSI				480		1000		8		AA-GF	F/CST 225-709 79 C/HLD 225-1 87 IMP 225-36-2 59 IT 225-22 59
Safrotin		OSHA PV2050				60		1000		1		GC-ECD	F/CST 225-709 79 C/HLD 225-1 87
Saphrophyte (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Saphrophyte (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Sarin		OSHA CSI				480		1000		8		GC-FPD	ST 226-30-16 35
Scopolamine methyl nitrate		OSHA PV2144				120		1000		2		HPLC-UV	F/CST 225-709 or F/CST 225-706 79 C/HLD 225-1 87
Scopulariopsis species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Scopulariopsis species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Selenium		OSHA ID 121		0.2 mg/m³		960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Selenium (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥		0.2 mg/m³		13-2000		1000-4000		varies		ICP-AES	F/CST 225-3-01 or F/CST 225-803 73 C/HLD 225-1 87
Selenium (elements by ICP HNO_3 digestion)		NIOSH 7303		0.2 mg/m³		8-250,000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Selenium (elements by ICP $HNO_3/HClO_4$ ashing)		NIOSH 7300	1455	0.2 mg/m³		13-2000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Selenium (elements on wipes)		NIOSH 9102				wipe						ICP-AES	W 225-2414 124 TMP 225-2403 or TMP 225-2415 124
Selenium compounds (as Se)		OSHA CSI		0.2 mg/m³		960		2000		8		AA-GF	F/CST 225-3-01 77 C/HLD 225-1 87
Sevin *(see carbaryl)*													
Sevoflurane	●	OSHA CSI				3		50		1		GC-FID	ST 226-81A 36
Silica (quartz, non-respirable) *(see dust, total nuisance)*		OSHA CSI											
Silica (quartz) in coal dust (quartz in coal mine dust by IR)		NIOSH 7603		0.05 mg/m³		300-1000		2500		varies		IR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-01-02 95 CST 225-3LF 86
Silica, amorphous		OSHA CSI		20 mppcf		960		2000		8		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-3LF 86
Silica, amorphous (respirable)		NIOSH 7501		6 mg/m³		50-400		2500		varies		XRD	F/CST 225-803 73 C/HLD 225-1 87 CYC 225-01-02 95
Silica, crystalline (respirable) by XRD		NIOSH 7500	1370	0.05 mg/m³		400-1000		2500		varies		XRD	F/CST 225-803 73 CYC 225-01-02 95 C/HLD 225-1 87
Silica, crystalline by IR		NIOSH 7602		0.05 mg/m³		400-800		2500		varies		IR	F/CST 225-803 73 C/HLD 225-1 87 CYC 225-01-02 95
Silica, crystalline by VAS		NIOSH 7601	1041	0.05 mg/m³		400-800		2500		varies		VAS	F/CST 225-803 73 C/HLD 225-1 87 CYC 225-01-02 95
Silica, crystalline cristobalite (respirable dust)		OSHA ID 142		[(10 mg/m³)/(%SiO2+2)]/2		varies		varies		varies		GR & XRD	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-105 94 CST 225-3LF 86
Silica, crystalline quartz (respirable dust)		OSHA ID 142	1003	(10 mg/m³)/(%SiO2+2)		varies		varies		varies		GR & XRD	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-105 94 CST 225-3LF 86
Silica, crystalline tridymite (respirable dust)		OSHA ID 142		[(10 mg/m³)/(%SiO2+2)]/2		varies		varies		varies		GR & XRD	FLT 225-8-01 73 CST 225-3LF 86 CYC 225-105 94 C/HLD 225-1 87
Silica, crystalline tripoli (respirable dust)		OSHA ID 142		(10 mg/m³)/(%SiO2+2)		varies		varies		varies		GR & XRD	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-105 94 CST 225-3LF 86
Silica, fused (respirable dust)		OSHA ID 142				varies		varies		varies		GR & XRD	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-105 94 CST 225-3LF 86
Silicon		OSHA CSI		15 mg/m³		960		2000		8		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-3LF 86
Silicon (particulates, respirable)		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-01-02 95 CST 225-3LF 86
Silicon (particulates, total)		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Silicon (respirable dust)		OSHA CSI		5 mg/m³		varies		varies		varies		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-105 85 CST 225-3LF 86
Silicon carbide (particulates, respirable)		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-01-02 95 CST 225-3LF 86
Silicon carbide (particulates, total)		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Silicon carbide (respirable dust)		OSHA CSI		5 mg/m³		varies		varies		varies		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-105 85 CST 225-3LF 86
Silicon carbide (total dust)		OSHA CSI		15 mg/m³		960		2000		8		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-3LF 86
Silicon tetrahydride (silane)		OSHA CSI				480		1000		8		AA-GF	IMP 225-36-2 59 IT 225-22 59
Silver (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥				250-2000		1000-4000		varies		ICP-AES	F/CST 225-3-01 or F/CST 225-803 73 C/HLD 225-1 87
Silver (elements by ICP $HNO_3/HClO_4$ ashing)		NIOSH 7300	1455	0.01 mg/m³ (metal, sol)		250-2000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87

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References and abbreviations are found on pages 196-197.

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Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Silver (elements on wipes)		NIOSH 9102				wipe						ICP-AES	W 225-2414 124 TMP 225-2415 124 TMP 225-2403 or
Silver, metal & soluble compounds (as Ag)		OSHA ID 121	1198	0.01 mg/m³		960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Silver, metal & soluble compounds (ICP analysis of metal/metalloid particulates from solder operations)		OSHA ID 206	1279	0.01 mg/m³		960		2000		8		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Silvex		OSHA CSI										W	W 225-2401A 124
Simazine		ASTM D 4861				240-7200		1000-5000		4-24		HPLC-UV	PUF 226-92 42
Simazine		NIOSH 5602				480		1000		8		GC-ECD	ST 226-58 36
Simazine		OSHA CSI				120		1000		2		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Soapstone (respirable dust)		OSHA CSI		20 mppcf		varies		varies		varies		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-105 85 CST 225-3LF 86
Soapstone (total dust)		OSHA CSI		20 mppcf		960		2000		8		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Sodium azide		OSHA ID 211				5		1000		5		IC-UV	ST 226-55 36 FLT 225-8-01 73 CST 225-2LF 86 SPC 225-23 87 C/HLD 225-1 87
Sodium bisulfite		OSHA ID 121	1203			960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Sodium carbonate *(see dust, respirable nuisance)*		OSHA CSI											
Sodium fluoride (fluorides)		NIOSH 7902		2.5 mg/m³		480	30	1000	2000	8	15	ISE	CF/CST 225-9001 61 C/HLD 225-1 87
Sodium fluoride (fluorides)		NIOSH 7906		2.5 mg/m³		480		1000		8		IC-ECN	CF/CST 225-9001 61 C/HLD 225-1 87
Sodium fluoroacetate		OSHA CSI		0.05 mg/m³		960	30	2000	2000	8	15	AA	F/CST 225-3-01 77 C/HLD 225-1 87
Sodium hexafluoroaluminate (fluorides)		NIOSH 7902		2.5 mg/m³		480	30	1000	2000	8	15	ISE	CF/CST 225-9001 61 C/HLD 225-1 87
Sodium hexafluoroaluminate (fluorides)		NIOSH 7906		2.5 mg/m³		480		1000		8		IC-ECN	CF/CST 225-9001 61 C/HLD 225-1 87
Sodium hydroxide		OSHA ID 121	1042	2 mg/m³		960	30	2000	2000	8	15	AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Sodium hydroxide (alkaline dust)		NIOSH 7401			2 mg/m³ (15 min)	360		1500		4		TITRA	FLT 225-17-01 74 CST 225-3LF 86 C/HLD 225-1 87
Sodium metabisulfite		OSHA ID 121				960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Sodium metasilicate		OSHA CSI										NVM	F/CST 225-3-01 77 C/HLD 225-1 87
Sodium nitrate		OSHA CSI				960		2000		8		AA or IC	F/CST 225-3-01 77 C/HLD 225-1 87
Sodium nitrite		OSHA CSI				960		2000		8		AA or IC	F/CST 225-3-01 77 C/HLD 225-1 87
Sodium o-phenyl phenate		OSHA CSI				10		20(50)		8(3.3)		GC-FID	F/CST 225-706 79 ST 226-35 35 C/HLD 225-1 87
Sodium polyacrylate *(see super absorbent polymer)*													
Solanesol (environmental tobacco smoke, respirable particles)		ASTM D 6271				150-3600		2500		1-24		HPLC-UV	FLT 225-2705 74 CST 225-3LF 86 CYC 225-01-02 95 C/HLD 225-1 87
Solder fume (ICP analysis of metal/metalloid particulates from solder operations)		OSHA ID 206				480		2000		4		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Solvents (skin)												CI	PCH 769-3050 122
Soot *(see elemental carbon)*		NIOSH 5040										TOA-FID	
Spores (bacterial, fungal) (in air)							15-150		15000		1-10 min	varies	STC 225-9820 81
Spores (bacterial, fungal) (in air)		NON 48				62.5-375		12500 +		5-30		varies	BS 225-9595 105 VT ◊ 225-9598A 105
Sporothrix species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Sporothrix species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Stachybotrys chartarum (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Stachybotrys chartarum (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Stachybotrys species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Stachybotrys species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Stannous-2-ethyl hexanoate (tin, organic compounds [as Sn])		OSHA CSI				480		1000		8		AA-GF	ST 226-30-16 35
Starch (particulates, respirable)		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-01-02 95 CST 225-3LF 86
Starch (particulates, total)		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Starch *(see dust, total & respirable nuisance)*													
Stoddard solvent		OSHA 48		500		12		200		1		GC-FID	ST 226-01 35
Stoddard solvent (naphthas)		NIOSH 1550		350 mg/m³	1800 mg/m³	10	1.5	20(50)	100	8(3.3)	15	GC-FID	ST 226-01 35
Strontium		OSHA CSI				480		1000		8		AA	F/CST 225-3-01 77 C/HLD 225-1 87
Strontium (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥				10-1000		1000-4000		varies		ICP-AES	F/CST 225-3-01 or C/HLD 225-1 87 F/CST 225-803 73
Strontium (elements by ICP HNO_3 digestion)		NIOSH 7303				300-100,000,000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Strontium (elements by ICP HNO_3/$HClO_4$ ashing)		NIOSH 7300	1455	0.5 mg/m³		10-1000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Strontium (elements on wipes)		NIOSH 9102				wipe						ICP-AES	W 225-2414 124 TMP 225-2415 124 TMP 225-2403 or
Strychnine		NIOSH 5016		0.15 mg/m³ (10 hr)		180		1500		2		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Strychnine		OSHA CSI		0.15 mg/m³		1000		3000		5.5		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Styrene (phenylethylene)	●	ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
Styrene (phenylethylene)	●	NON 54				10	3	20	200	8	15	GC-FID	ST 226-81A 36
Styrene (phenylethylene)	●	OSHA 09		100	200 (C)	10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
Styrene (phenylethylene)	●	OSHA 1014		100	200 (C)			13.55	13.55	8	15	HPLC-UV	PS 575-006 64
Styrene (phenylethylene)	●	OSHA 89	1368	100	200 (C)	12	0.75	50	50	4	15	GC-FID	ST 226-73 36
Styrene (phenylethylene) (hydrocarbons, aromatic)	●	NIOSH 1501		50	100	1-14	1-14	10-1000	10-1000	varies	varies	GC-FID	ST 226-01 35
Styrene oxide		OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-35 35
Subtilisins (proteolytic enzymes)		OSHA CSI										Bulk	

Agency standards for OSHA listings represent the OSHA PELs reported in the 29 CFR 1910.1000 Part 1910, Section 1000.

References and abbreviations are found on pages 196-197.

Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	CLG/STEL (ppm)	Vol. (liter) TWA	CLG/STEL	Rate (ml/min) TWA	CLG/STEL	Time TWA (hrs)	CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Sucrose (particulates, respirable)		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-01-02 95 CST 225-3LF 86
Sucrose (particulates, total)		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Sucrose *(see dust, total or dust, respirable nuisance)*		OSHA CSI											
Sudan I		OSHA CSI				90		1000		2		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Sudan III		OSHA CSI				90		1000		1.5		HPLC	F/CST 225-709 79 C/HLD 225-1 87
Sulfamethazine		OSHA CSI				100		1000		1.5		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Sulfamic acid		OSHA CSI				100		1000		100 min		IC	F/CST 225-709 79 C/HLD 225-1 87
m-Sulfobenzoic acid		OSHA CSI				180		1000		3		HPLC-UV	F/CST 225-3-01 77 C/HLD 225-1 87
Sulfur *(see dust, total & respirable nuisance)*													
Sulfur dioxide	●	NIOSH 6004	1331	2	5	180	15	1000	1000	3	15	IC	CF/CST 225-9005 61 C/HLD 225-1 87
Sulfur dioxide	●	OSHA 1011		5 ppm		12	7.5	50	500	4	15	IC	ST 226-177 38
Sulfur dioxide	●	OSHA ID 104		5		60	15	1000	1000	1	15	IC	F/CST 225-3-01 77 IMP 225-36-2 59 IT 225-22 59
Sulfur dioxide	●	OSHA ID 200	1461	5		12	1.5	100	100	2	15	IC	ST 226-80 36
Sulfur dioxide (using prefilter)		OSHA ID 200	1622	5		12	1.5	100	100	2	15	IC	ST 226-80 36 FLT 225-2708 74 CST 225-3-23 86 C/HLD 225-1 87
Sulfur hexafluoride by portable GC		NIOSH 6602	1023	1000		varies		20-100		varies		P GC-ECD	SB 232-03 or SB 231-03 51
Sulfur monochloride		OSHA CSI			1		5		1000		5	IC	IMP 225-36-2 59 IT 225-22 59
Sulfur tetrafluoride		OSHA ID 110					5		1000		5	ISE	IMP 225-36-2 59 IT 225-22 59
Sulfuric acid		OSHA ID 113	1465	1 mg/m³		480		2000		4		IC	F/CST 225-3-01 77 C/HLD 225-1 87
Sulfuric acid		OSHA ID 113		0.2 mg/m³		480		2000		4		IC	PPI 225-381 96 FLT 225-5 76 IS 225-388 96 SP 225-27 87
Sulfuric acid		OSHA ID 165SG		1 mg/m³		96		200		8		IC	ST 226-10-03 35
Sulfuric acid (acids, inorganic)		NIOSH 7903	1016	1 mg/m³		48		200		4		IC	ST 226-10-03 35
Sulfuric acid mist		ASTM D 4856	1431			40		1000		40 min		IC	F/CST 225-3-01 77 C/HLD 225-1 87
Sulfuryl fluoride		NIOSH 6012		5	10	10		20		8		IC-ECN	ST 226-16 35
Sulfuryl fluoride		OSHA CSI		5		24	1.5	100	100	4	15	IC	ST 226-16 35
Sulprofos		OSHA PV2037				240		1000		4		GC-FPD	ST 226-30-16 35
Sulprofos (organophosphorus pesticides)		NIOSH 5600		1 mg/m³		240		1000		4		GC-FPD	ST 226-58 36
Super absorbent polymers		NIOSH 5035				960		2000		8		ICP-AES or AA	F/CST 225-802 73 C/HLD 225-1 87
Syncephalastrum species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Syncephalastrum species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Systox *(see demeton)*													
2,4,5-T		OSHA CSI		10 mg/m³		200		3000		1		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Talc (containing asbestos) *(see asbestos)*		OSHA ID 160											
Talc (respirable, with no asbestos)		OSHA CSI		20 mppcf		varies		varies		varies		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-105 94 CST 225-3LF 86
Tannin		OSHA CSI				60		1000		1		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Tantalum (metal, oxide dusts)		OSHA CSI		5 mg/m³		960		2000		8		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-3LF 86
2,4-TDI (toluene diisocyanate)		ASTM D 5932				15		1000		15		HPLC-UV-FD	CF/CST 225-9022 61 C/HLD 225-1 87
2,4-TDI (toluene diisocyanate)		NIOSH 5522		LFC		360	20	1000	2000	6	10	HPLC-FD	IMP 225-36-1 59 IT 225-22 59
2,4-TDI (toluene diisocyanate)		OSHA 42	1458		0.02 (C)	240	15	1000	1000	4	15	HPLC-UV or HPLC-FD	CF/CST 225-9002 or CF/CST 225-9013 61 C/HLD 225-1 87
2,6-TDI (toluene diisocyanate)		ASTM D 5932				15		1000		15		HPLC-UV-FD	CF/CST 225-9022 61 C/HLD 225-1 87
2,6-TDI (toluene diisocyanate)		NIOSH 5522		LFC		360	20	1000	2000	6	10	HPLC-FD	IMP 225-36-1 59 IT 225-22 59
2,6-TDI (toluene diisocyanate)		OSHA 42	1458				15		2000		15	HPLC-UV or HPLC-FD	CF/CST 225-9002 or CF/CST 225-9013 61 C/HLD 225-1 87
2, 4-TDI (toluene diisocyanate) (isocyanates, total)		NIOSH 5525		LFC		1-500		1000-2000		varies		HPLC-UV	FLT 225-7 ‡ 79 CST 225-4 86 SP 225-27 or IOM 225-76A 92 FLT 225-702 ‡ 79
2, 6-TDI (toluene diisocyanate) (isocyanates, total)		NIOSH 5525		LFC		1-500		1000-2000		varies		HPLC-UV	FLT 225-7 ‡ 79 CST 225-4 86 SP 225-27 or IOM 225-76A 92 FLT 225-702 ‡ 79
2,4-TDI (toluene diisocyanate) (isocyanates)		OR-OSHA 1010		0.02	0.005	45	5	1000	1000	45 min	5	HPLC	IMP 225-36-1 59 IT 225-22 59 CF/CST 225-9029 61
2,6-TDI (toluene diisocyanate) (isocyanates)		OR-OSHA 1010		0.02	0.005	45	5	1000	1000	45 min	5	HPLC	IMP 225-36-1 59 IT 225-22 59 CF/CST 225-9029 61
TEDP		OSHA CSI		0.2 mg/m³		480		1000		8		GC-FPD	ST 226-30-16 35
Tellurium		OSHA ID 121		0.1 mg/m³		960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Tellurium		OSHA ID 132SG	1215	0.1 mg/m³		100 to 1000		1500 to 2000		varies		AA-GF	F/CST 225-3-01 77 C/HLD 225-1 87
Tellurium (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥		0.1 mg/m³		25-2000		1000-4000		varies		ICP-AES	F/CST 225-3-01 or F/CST 225-803 73 C/HLD 225-1 87
Tellurium (elements by ICP HNO_3 digestion)		NIOSH 7303		0.1 mg/m³		125-500,000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Tellurium (elements by ICP HNO_3/$HClO_4$ ashing)		NIOSH 7300	1455	0.1 mg/m³		25-2000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Tellurium (elements on wipes)		NIOSH 9102				wipe						ICP-AES	W 225-2414 124 TMP 225-2403 or TMP 225-2415 124
Tellurium hexafluoride (as Te)		OSHA CSI		0.02		480		1000		8		AA	ST 226-01 35 F/CST 225-3-01 77
Temephos (respirable dust)		OSHA PV2056		5 mg/m³		varies		varies		varies		GC-FPD	F/CST 225-706 79 C/HLD 225-1 87
Temephos (total dust)		OSHA CSI		15 mg/m³		480		1000		8		GC-FPD	ST 226-30-16 35
TEPP		OSHA CSI		0.05 mg/m³		480		1000		8		GC-FPD	ST 226-30-16 35
Terbufos		OSHA CSI				480		1000		8		GC-FPD	ST 226-30-16 35
Terbufos (organophosphorus pesticides)		NIOSH 5600				240		1000		4		GC-FPD	ST 226-58 36

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References and abbreviations are found on pages 196-197.

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Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Terbuthiuron		ASTM D 4861				240-7200		1000-5000		4-24		HPLC-UV	PUF 226-92 42
Tergitol NP-33		OSHA CSI				100		1000		1.6		HPLC-UV	ST 226-57 36
Terpenes (screening)		NIOSH 2549				5		20		4		GC-MS	ST 226-330 39
Terpenes *(see specific compounds)*		NIOSH 1552	1463			24		50		8		GC-FID	ST 226-01 35
o-Terphenyl		NIOSH 5021			0.5		30		2000		15	GC-FID	F/CST 225-1713 74 C/HLD 225-1 87
o-Terphenyl *(see terphenyls)*		OSHA CSI											
Terphenyls		OSHA CSI			1 (C)		8.5		1700		5	HPLC-FD	F/CST 225-709 79 C/HLD 225-1 87
Terpineol	●	OSHA CSI				10		200		50 min		GC-FID	ST 226-01 35
Testosterone		OSHA PV2001				60		1000		1		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Tetrabromobisphenol A		OSHA CSI				100		1000		100 min		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
1,1,2,2-Tetrabromoethane		NIOSH 2003				96		200		8		GC-FID	ST 226-10 35
Tetrabutyltin (organotin compounds as Sn)		NIOSH 5504		0.1 mg/m³		480		1000		8		HPLC & AA-GF	ST 226-30 35 C/HLD 225-1 87 F/CST 225-709 79
1,1,2,2-Tetrachloro-1,2-difluoroethane		NIOSH 1016		500		2		20		1.5		GC-FID	ST 226-01 35
1,1,2,2-Tetrachloro-1,2-difluoroethane		OSHA 07	1182	500		2		50		40 min		GC-FID	ST 226-01 35
1,1,1,2-Tetrachloro-2,2-difluoroethane		NIOSH 1016		500		2		20		1.5		GC-FID	ST 226-01 35
1,1,1,2-Tetrachloro-2,2-difluoroethane		OSHA 07	1181	500		2		50		40 min		GC-FID	ST 226-01 35
1,2,3,4-Tetrachlorobenzene		ASTM D 4861				240-7200		1000-5000		4-24		GC-ECD	PUF 226-124 42
1,2,3,5-Tetrachlorobenzene		OSHA CSI				12		100		2		GC-ECD	FLT 225-17-03 74 ST 226-30-04 35 CST Special order C/HLD 225-1 87
1,2,4,5-Tetrachlorobenzene (polychlorobenzenes)		NIOSH 5517				12		25		8		GC-ECD	FLT 225-17-03 74 ST 226-30-04 35 CST Special order C/HLD 225-1 87
2,3,7,8-Tetrachlorodibenzo-p-dioxin		OSHA CSI				30		1000		0.5		NVM	IMP 225-36-1 59 IT 225-22 59
2,3,7,8-Tetrachlorodibenzofuran		OSHA CSI				30		1000		0.5		NVM	IMP 225-36-1 59 IT 225-22 59
1,1,2,2-Tetrachloroethane	●	ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
1,1,2,2-Tetrachloroethane	●	NIOSH 1019		1		24		50		8		GC-FID	ST 226-81A 36
1,1,2,2-Tetrachloroethane		NIOSH 2562		1		3-30		10-200		varies		GC-FID	ST NA SKC
1,1,2,2-Tetrachloroethane	●	OSHA 07		5		30		200		2.5		GC-FID	ST 226-81A 36
Tetrachloroethylene (hydrocarbons, halogenated)	●	NIOSH 1003		LFC		3		10-200		varies		GC-FID	ST 226-01 35
Tetrachloroethylene (perchloroethylene)	●	ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
Tetrachloroethylene (perchloroethylene)	●	OSHA 07		100	200	24		50		8		GC-FID	ST 226-01 35
Tetrachloroethylene (perchloroethylene)	●	OSHA 1001	1747	100	200 (C)	12	0.75	50	50	4	5	GC-FID	ST 226-01 35
Tetrachloroethylene (perchloroethylene)	●	OSHA 1001	1747	100	200 (C)			13.06		8	5	GC-FID	PS 575-002 64
Tetrachloroethylene (perchloroethylene) (portable GC)		NIOSH 3704		LFC		1		20-5000		varies		P GC	SB 232-01 50
Tetrachloronaphthalene		OSHA CSI		2 mg/m³		90		1000		1.5		GC-FID	ST 226-30-16 35
2,3,4,6-Tetrachlorophenol		OSHA 45				48		200		4		HPLC-UV	ST 226-97 37
Tetraethyl lead (as Pb)		NIOSH 2533		0.075 mg/m³		120		1000		2		GC-PID	ST 226-30-04 35
Tetraethyl lead (as Pb)		OSHA CSI		75 µg/m³		480		1000		8		AA	ST 226-01 35 C/HLD 225-1 87 F/CST 225-706 79
Tetraethyl pyrophosphate		NIOSH 2504		0.05 mg/m³		24		50		8		GC-FPD	ST 226-105 37
Tetraethyl tin		OSHA 110		0.1 mg/m³		48	3	200	200	4	15	GC-FID	ST 226-95 37
Tetraethylene glycol		NIOSH 5523				60		1000		1		GC-FID	ST 226-57 36
Tetraethylene glycol diacrylate		OSHA CSI				10		20(50)		8(3.3)		HPLC-UV	ST 226-95 37
Tetraethylene glycol dimethacrylate		OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-95 37
Tetraethylenepentamine		OSHA CSI					15		1000		15	HPLC-UV	FLT 225-7 ‡ 79 C/HLD 225-1 87 CST 225-2LF 86
Tetrahydrofuran	●	NIOSH 1609		200	250	9	1.5	20(50)	100	7(3)	15	GC-FID	ST 226-01 35
Tetrahydrofuran	●	OSHA 07	1064	200		10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
Tetrahydrofurfuryl acrylate		OSHA PV2131		1 mg/m³		48		200		4		GC-FID	ST 226-110 37
Tetrakis(hydroxymethyl)phosphonium chloride		NIOSH 5046				1-480		1000-1700		varies		HPLC-UV	CF/CST 225-9003 61
Tetramethyl lead (as Pb)		NIOSH 2534		75 µg/m³		96		200		8		GC-PID	ST 226-30-06 35
Tetramethyl lead (as Pb)		OSHA CSI		75 µg/m³		480		1000		8		AA	F/CST 225-709 79 C/HLD 225-1 87 ST 226-01 35
Tetramethyl succinonitrile		OSHA 07	1183	0.5		10		20		8		GC-FID	ST 226-01 35
Tetramethyl thiouram disulfide *(see thiram)*													
Tetramethyl thiourea		NIOSH 3505				96		200		8		VAS	IMP 225-36-1 59 IT 225-22 59
Tetramethyl tin		OSHA PV2057		0.1 mg/m³		20		200		100 min		GC-FID	ST 226-01 35
1,2,3,4-Tetramethylbenzene	●	OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-01 35
1,2,3,5-Tetramethylbenzene	●	OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-01 35
1,2,4,5-Tetramethylbenzene	●	OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-01 35
Tetramethyldiaminobenzophenone		OSHA CSI				180		1000		3		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
N,N,N',N'-Tetramethylethylenediamine		OSHA CSI				480		1000		8		GC-NPD	IMP 225-36-1 59 IT 225-22 59
Tetranitromethane		NIOSH 3513		1		240		1000		4		GC-NPD	IMP 225-36-1 59 IT 225-22 59
Tetranitromethane		OSHA CSI		1		240		1000		4		GC-NPD	IMP 225-36-1 59 IT 225-22 59
Tetrasodium pyrophosphate		OSHA ID 111				960		2000		8		GR & IC	FLT 225-8-01 73 CST 225-2LF 86 C/HLD 225-1 87
Tetrasodium pyrophosphate		OSHA ID 121				960		2000		8		AA or AES	FLT 225-8-01 73 CST 225-2LF 86 C/HLD 225-1 87
Tetryl (2,4,6-trinitrophenyl-methylnitramine)		OSHA CSI		1.5 mg/m³		90		1500		1		CLR	F/CST 225-3-01 77 C/HLD 225-1 87
Thalium (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥		0.1 mg/m³ (skin, sol)		25-2000		1000-4000		varies		ICP-AES	F/CST 225-3-01 or 87 C/HLD 225-1 F/CST 225-803 73
Thallium (elements by ICP HNO_3 digestion)		NIOSH 7303		0.1 mg/m³ (skin, sol)		35-500,000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87

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References and abbreviations are found on pages 196-197.

Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Thallium (elements by ICP HNO_3/$HClO_4$ ashing)		NIOSH 7300	1455	0.1 mg/m³ (skin, sol)		25-2000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Thallium (elements on wipes)		NIOSH 9102				wipe						ICP-AES	W 225-2414 124 TMP 225-2415 124 TMP 225-2403 or
Thallium (soluble compounds) (as Tl)		OSHA ID 121	1202	0.1 mg/m³		960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Thimet (phorate)		OSHA CSI				480	15	1000	1000	8	15	GC-FPD	ST 226-30-16 35
Thiobencarb (organonitrogen pesticides)		NIOSH 5601				240		1000		4		HPLC-UV	ST 226-58 or ST 226-30-16 35
4,4'-Thiobis(6-tert-butyl-m-cresol) (respirable dust)		OSHA CSI		5 mg/m³		varies		varies		varies		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87 CYC 225-105 85
4,4'-Thiobis(6-tert-butyl-m-cresol) (total dust)		OSHA CSI		15 mg/m³		60		1000		1		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Thioglycolic acid		OSHA CSI				120		1000		2		HPLC-UV	IMP 225-36-1 59 IT 225-22 59
Thionyl chloride		OSHA CSI					15		1000		15	IC	IMP 225-36-2 59 IT 225-22 59
Thiophanate		OSHA CSI				180		1000		3		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Thiophanate-methyl		OSHA PV2058				240		1000		4		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Thiophanate-methyl in air		NIOSH 5606				20-480		10-1000		varies		HPLC-UV	ST 226-58 36
Thiophene		OSHA CSI				48		100		8		GC-FPD	ST 226-01 35
Thiourea		OSHA PV2059				480		2000		4		HPLC-UV	F/CST 225-706 79 C/HLD 225-1 87
Thiram		NIOSH 5005		5 mg/m³		120		1000		2		HPLC-UV	FLT 225-17-01 74 C/HLD 225-1 87 CST 225-2LF 86
Thorium		OSHA CSI				960		2000		8		N ACT	F/CST 225-3-01 77 C/HLD 225-1 87
L-Thyroxine		OSHA PV2117				240		1000		4		HPLC-UV	F/CST 225-709 79 C/HLD 225-1 87
Tin (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥		2 mg/m³		5-1000		1000-4000		varies		ICP-AES	F/CST 225-3-01 or C/HLD 225-1 87 F/CST 225-803 73
Tin (elements by ICP HNO_3 digestion)		NIOSH 7303		2 mg/m³		1-25000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Tin (elements by ICP HNO_3/$HClO_4$ ashing)		NIOSH 7300	1455	2 mg/m³		5-1000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Tin (ICP analysis of metal/metalloid particulates from solder operations)		OSHA ID 206		2 mg/m³		480		2000		4		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Tin (inorganic compounds, except oxides) (as Sn)		OSHA ID 121	1201	2 mg/m³		960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Tin (organic compounds, *see specific compounds*) (as Sn)		OSHA CSI											
Tin (organic compounds) (as Sn) (organotin compounds)		NIOSH 5504		0.1 mg/m³		480		1000		8		HPLC & AA-GF	ST 226-30 35 C/HLD 225-1 87 F/CST 225-706 79
Tin oxide ([stannous oxide] as Sn)		OSHA ID 121	1200	0.1 mg/m³		960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Titanium (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥				5-1000		1000-4000		varies		ICP-AES	F/CST 225-3-01 or C/HLD 225-1 87 F/CST 225-803 73
Titanium (elements by ICP HNO_3 digestion)		NIOSH 7303				0.1-10,000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Titanium (elements by ICP HNO_3/$HClO_4$ ashing)		NIOSH 7300	1455			5-100		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Titanium *(see titanium dioxide)*		OSHA CSI											
Titanium dioxide (particulates, respirable)		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-01-02 95 CST 225-3LF 86
Titanium dioxide (particulates, total)		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Titanium dioxide (total dust)		OSHA CSI		15 mg/m³		960		2000		8		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-3LF 86
TNT (2,4,6-trinitrotoluene)		OSHA 44		1.5 mg/m³		60		1000		1		GC-TEA-EAP	ST 226-56 36
o-Tolidine		OSHA 71	1236			100		1000		100 min		GC-ECD	CF/CST 225-9004 61 C/HLD 225-1 87
o-Tolidine based dyes		OSHA CSI				480		1000		8		HPLC-UV	FLT 225-17A 74 C/HLD 225-1 87 CST 225-3LF 86
o-Tolidine dyes (dyes, benzidine)		NIOSH 5013		LFC		480		1000		8		HPLC-UV	FLT 225-17A 74 C/HLD 225-1 87 CST 225-3LF 86
m-Tolualdehyde		ASTM D 5197				varies		500-1200		5 min-24 hrs		HPLC-UV	ST 226-120 O or ST 226-119 37
o-Tolualdehyde		ASTM D 5197				varies		500-1200		5 min-24 hrs		HPLC-UV	ST 226-120 O or ST 226-119 37
p-Tolualdehyde		ASTM D 5197				varies		500-1200		5 min-24 hrs		HPLC-UV	ST 226-120 O or ST 226-119 37
o-Toluamide		OSHA CSI		5 mg/m³		240		1000		4		HPLC	F/CST 225-709 79 C/HLD 225-1 87
Toluene	●	ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
Toluene	●	OSHA 07		200	300	10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
Toluene	●	OSHA 111	1748	200	300 (C)	12	0.5	50	50	4	10	GC-FID	ST 226-81A 36 ST 226-01 35
Toluene (hydrocarbons, aromatic)	●	NIOSH 1501		100	150	1-8	1-8	10-200	10-200	varies	varies	GC-FID	ST 226-01 35
2,4-Toluene diisocyanate		ASTM D 5836	1432			15		1000		15		HPLC-UV or HPLC-FD	CF/CST 225-9002 61 C/HLD 225-1 87
2,4-Toluene diisocyanate		ASTM D 5932				15		1000		15		HPLC-UV-FD	CF/CST 225-9022 61 C/HLD 225-1 87
2,4-Toluene diisocyanate		OSHA 42	1458		0.02 (C)	240	15	1000	1000	4	15	HPLC-UV or HPLC-FD	CF/CST 225-9002 or C/HLD 225-1 87 CF/CST 225-9013 61
2,6-Toluene diisocyanate		ASTM D 5836	1432			15		1000		15		HPLC-UV or HPLC-FD	CF/CST 225-9002 61 C/HLD 225-1 87
2,6-Toluene diisocyanate		ASTM D 5932				15		1000		15		HPLC-UV-FD	CF/CST 225-9022 61 C/HLD 225-1 87
2,6-Toluene diisocyanate		OSHA 42	1458			240		1000		4		HPLC-UV or HPLC-FD	CF/CST 225-9002 or C/HLD 225-1 87 CF/CST 225-9013 61
2,4-Toluene diisocyanate (isocyanates, total)		NIOSH 5525		LFC		1-500		1000-2000		varies		HPLC-UV	FLT 225-7 ‡ 79 SP 225-27 or FLT 225-702 ‡ 79 CST 225-4 86 IOM 225-76A 92
2,6-Toluene diisocyanate (isocyanates, total)		NIOSH 5525		LFC		1-500		1000-2000		varies		HPLC-UV	FLT 225-7 ‡ 79 SP 225-27 or FLT 225-702 ‡ 79 CST 225-4 86 IOM 225-76A 92
2,4-Toluene diisocyanate (isocyanates)		NIOSH 5521		LFC		480	10	1000	1000	8	10	HPLC-ELCHM & HPLC-UV	IMP 225-36-1 59 IT 225-22 59

Agency standards for OSHA listings represent the OSHA PELs reported in the 29 CFR 1910.1000 Part 1910, Section 1000.

References and abbreviations are found on pages 196-197.

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Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
2,4-Toluene diisocyanate (isocyanates)		OR-OSHA 1010		0.02	0.005	45	5	1000	1000	45 min	5	HPLC	IMP 225-36-1 59 IT 225-22 59 CF/CST 225-9029 61
2,6-Toluene diisocyanate (isocyanates)		NIOSH 5521		LFC		480		1000		8		HPLC-ELCHM & HPLC-UV	IMP 225-36-1 59 IT 225-22 59
2,6-Toluene diisocyanate (isocyanates)		OR-OSHA 1010		0.02	0.005	45	5	1000	1000	45 min	5	HPLC	IMP 225-36-1 59 IT 225-22 59 CF/CST 225-9029 61
p-Toluene sulfonic acid		NIOSH 5043				960	45	2000	3000	8	15	HPLC-UV	FLT 225-16 79 CST 225-32 87
p-Toluene sulfonic acid		OSHA CSI				120		1000		2		HPLC-UV	IMP 225-36-1 59 IT 225-22 59
Toluene-2,4-diamine		OSHA 65	1237		0.02 (C)	100		1000		100 min		GC-ECD	CF/CST 225-9004 61 C/HLD 225-1 87
2,4-Toluenediamine		NIOSH 5516		LFC		480		1000		8		HPLC-UV	IMP 225-36-1 59 IT 225-22 59
2,4-Toluenediamine		OSHA 65	1237		0.02 (C)	100		1000		100 min		GC-ECD	CF/CST 225-9004 61 C/HLD 225-1 87
2,6-Toluenediamine		NIOSH 5516		LFC		480		1000		8		HPLC-UV	IMP 225-36-1 59 IT 225-22 59
2,6-Toluenediamine		OSHA 65	1237			100		1000		100 min		GC-ECD	CF/CST 225-9004 61 C/HLD 225-1 87
2,6-Toluenediamine		OSHA 65	1237			100		1000		100 min		GC-ECD	CF/CST 225-9004 61 C/HLD 225-1 87
m-Toluidine		OSHA 73	1230			100		1000		100 min		GC-ECD	CF/CST 225-9004 61 C/HLD 225-1 87
o-Toluidine		NIOSH 2017		LFC		24		200		2		GC-FID	CF/CST 225-9004 61 ST 226-15 35
o-Toluidine		OSHA 73	1230	5		100		1000		100 min		GC-ECD	CF/CST 225-9004 61 C/HLD 225-1 87
p-Toluidine		OSHA 73	1230			100		1000		100 min		GC-ECD	CF/CST 225-9004 61 C/HLD 225-1 87
o-Toluidine (amines, aromatic)		NIOSH 2002	1057	LFC		48		100		8		GC-FID or GC-NSD	ST 226-10 35
o-Toluidine based dyes		OSHA CSI				480		1000		8		HPLC-UV	FLT 225-17-04 74 CST 225-3LF 86 C/HLD 225-1 87
Torak		OSHA CSI										W	W 225-2401A 124
Torula species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Torula species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Toxaphene													
Tremolite *(see asbestos fibers)*		NIOSH 7400											
Tremolite fibers *(see asbestos)*		OSHA ID 160											
Trially isocyanurate		OSHA CSI				10		20(50)		8(3.3)		GC-NPD	ST 226-01 35
Triazine pesticides		ASTM D 4861				960		2000		8		GC-ECD	PUF 226-92 42
Tributyl phosphate		NIOSH 5034		0.2		90		1500		1		GC-FPD	F/CST 225-3-01 77 C/HLD 225-1 87
Tributyl phosphate		OSHA CSI		5 mg/m³		90		1500		1		GC-FPD	F/CST 225-3-01 77 C/HLD 225-1 87
Tributyl phosphorotrithioate		OSHA CSI				480		1000		8		GC-FPD	IMP 225-36-1 59 IT 225-22 59
Tributyl phosphorotrithioate		OSHA CSI				480		1000		8		GC-FID	IMP 225-36-1 59 IT 225-22 59
Tributyltin benzoate (tin, organic compounds [as Sn])		OSHA ID 222SG				200		2000		100 min		AA-GF	F/CST 225-803 73 C/HLD 225-1 87
Tributyltin chloride (organotin compounds as Sn)		NIOSH 5504		0.1 mg/m³		480		1000		8		HPLC & AA-GF	ST 226-30 35 F/CST 225-709 79 C/HLD 225-1 87
Tributyltin fluoride (tin, organic compounds [as Sn])		OSHA ID 223SG				200		2000		100 min		AA-GF	F/CST 225-803 73 C/HLD 225-1 87
Tributyltin neodecanoate *(see tin, organic compounds)*													
Trichlorfon		OSHA CSI				390		1000		6.5		GC-FPD	ST 226-30-16 35
1,1,2-Trichloro-1,2,2-trifluoroethane		OSHA 113		1000		1		50		20 min		GC-FID	ST NA SKC
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	●	NIOSH 1020	1061	1000	1250	2.4	0.3	20	20	2	15	GC-FID	ST 226-01 35
1,1,1-Trichloro-2,2,2-trifluoroethane		OSHA CSI				3		20		2.5		GC-FID	ST 226-01 35
Trichloroacetic acid		OSHA PV2017				10		200		50		HPLC-UV	ST 226-10 35
1,2,3-Trichlorobenzene		ASTM D 4861				240-7200		1000- 5000		4 to 24		GC-ECD	PUF 226-124 42
1,2,3-Trichlorobenzene		OSHA CSI				12		50		4		GC-ECD	FLT 225-17-03 74 CST Special order 87 ST 226-30-04 35 C/HLD 225-1
1,2,4-Trichlorobenzene		ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
1,2,4-Trichlorobenzene		OSHA CSI					5		1000		5	GC-ECD	FLT 225-17-03 74 CST Special order 87 ST 226-30-04 35 C/HLD 225-1
1,2,4-Trichlorobenzene (polychlorobenzenes)		NIOSH 5517			5	12	3	25	200	8	15	GC-ECD	FLT 225-17-03 74 CST Special order 87 ST 226-30-04 35 C/HLD 225-1
1,1,2-Trichloroethane	●	ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
1,1,2-Trichloroethane	●	OSHA 11	1071	10		10		200		1		GC-FID	ST 226-01 35
1,1,2-Trichloroethane (hydrocarbons, halogenated)	●	NIOSH 1003		10 (skin)		10		10-200		varies		GC-FID	ST 226-01 35
1,1,1-Trichloroethane (methyl chloroform) (hydrocarbons, halogenated)	●	NIOSH 1003			350		3		10-200		varies	GC-FID	ST 226-01 35
Trichloroethylene	●	ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
Trichloroethylene	●	OSHA 07	1184	100	200 (C)	10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
Trichloroethylene	●	OSHA 1001	1747	100	200 (C)	12	0.75	50	50	4	5	GC-FID	ST 226-01 35
Trichloroethylene	●	OSHA 1001	1747	100	200 (C)			14.24		8	5	GC-FID	PS 575-002 64
Trichloroethylene (hydrocarbons, halogenated)		NIOSH 1003				10		10-200		varies		GC-FID	ST 226-01 35
Trichloroethylene by portable GC		NIOSH 3701	1030	25	2 (1 hr)	varies	varies	20-50	varies	varies	varies	P GC-PID	SB 232 Series 50
Trichlorofluoromethane (fluorotrichloromethane)		NIOSH 1006			1000		5		20		240	GC-FID	ST 226-09 35
Trichloronaphthalene		OSHA CSI		5 mg/m³		90		1000		1.5		GC-ECD	ST 226-30-16 35
Trichloronitromethane		NON 51		0.1		144		100		24		GC-MSD	ST 226-175 38
2,4,5-Trichlorophenol		ASTM D 4861				240-7200		1000- 5000		4 to 24		GC-ECD	PUF 226-92 42
2,4,5-Trichlorophenoxyacetic acid *(see 2,4,5-T)*													
1,2,3-Trichloropropane	●	OSHA 07	1185	50		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
1,2,3-Trichloropropane (hydrocarbons, halogenated)	●	NIOSH 1003		10 (skin)		0.6-60		10-200		varies		GC-FID	ST 226-01 35
2,3,6-Trichlorotoluene		OSHA CSI				10		20(50)		8(3.3)		GC-FID	ST 226-01 35

Agency standards for OSHA listings represent the OSHA PELs reported in the 29 CFR 1910.1000 Part 1910, Section 1000.

References and abbreviations are found on pages 196-197.

				SAMPLING ∞															
				Agency Standard		Vol. (liter)		Rate (ml/min)		Time									
Chemical Hazard	Passive Guide	Agency Reference	Chem F File	TWA (ppm)	CLG/STEL (ppm)	TWA	CLG/ STEL	TWA	CLG/ STEL	TWA (hrs)	CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number						
Trichoderma species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST	225-3-01	77	C/HLD	225-1	87	
Trichoderma species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI	225-9611	103				
Tricyclohexyltin hydroxide (organotin compounds as Sn)		NIOSH 5504		0.1 mg/m³		480		1000		8		HPLC & AA-GF	ST C/HLD	226-30 225-1	35 87	F/CST	225-709	79	
Tridymite (silica, crystalline [respirable]) by XRD		NIOSH 7500	1370	0.05 mg/m³		400-1000		2500		varies		XRD	F/CST C/HLD	225-803 225-1	73 87	CYC	225-01-02	95	
Tridymite (silica, crystalline by IR)		NIOSH 7602		0.05 mg/m³		400-800		2500		varies		IR	F/CST CYC	225-803 225-01-02	73 95	C/HLD	225-1	87	
Triethanolamine (TEA)		OSHA PV2141				120		1000		2		GC-FID	F/CST	225-709	79	C/HLD	225-1	87	
Triethanolamine (TEA) (aminoethanol compounds II)		NIOSH 3509				240		1000		4		IC	IMP	225-36-1	59	IT	225-22	59	
Triethylamine	●	OSHA PV2060		25		5	3	100	200	50 min	15	GC-FID	ST	226-98	37				
Triethylene glycol		NIOSH 5523				60		1000		1		GC-FID	ST	226-57	36				
Triethylenetetramine (TETA)		OSHA 60	1286			10		100		100 min		HPLC-UV	ST	226-30-18	35				
Trifluorobromomethane		NIOSH 1017		1000		1		20		50 min		GC-FID	ST	226-01	35	ST	226-09	35	
2,2,2-Trifluoroethanol		OSHA CSI				5		20		4		GC-FID	ST	226-01	35				
Trifluoromethyl benzene (benzotrifluoride, OXSOL 2000)	●				100							GC-FID	PS	575-001	or	PS	575-002	64	
Trifluoromonobromomethane		OSHA 07		1000		1		20		50 min		GC-FID	ST	226-01	35	ST	226-09	35	
Trifluoromonobromomethane (trifluorobromomethane)		NIOSH 1017		1000		1		20		50 min		GC-FID	ST	226-01	35	ST	226-09	35	
Trifluralin		ASTM D 4861				240-7200		1000- 5000		4 to 24		GC-ECD	PUF	226-92	42				
Trifluralin		OSHA CSI				48		100		8		HPLC-UV	ST	226-56	36				
1,3,5-Triglycidyl isocyanurate		OSHA PV2055				60		1000		1		GC-ECD	CF/CST	225-9027	61	C/HLD	225-1	87	
Trimellitic anhydride (TMA)		NIOSH 5036		0.005 (10 hr)		960		2000		8		GC-FID	F/CST	225-802	73	C/HLD	225-1	87	
Trimellitic anhydride (TMA)		OSHA 98				480		2000		4		HPLC-UV	CF/CST	225-9010 ††	61	C/HLD	225-1	87	
2,2,4-Trimethyl-1,3-pentanediol diisobutyrate		OSHA PV2002				10		100		100 min		GC-FID	ST	226-110	37				
Trimethylamine		OSHA CSI				10	1.5	100	100	100 min	15	GC-NPD	ST	226-98	37				
1,2,3-Trimethylbenzene	●	OSHA PV2091				10		100		100 min		GC-FID	ST	226-01	35				
1,2,4-Trimethylbenzene	●	ASTM D 5466				6		varies		varies		GC-MS	CAN	228 Series		PK	228 Series		
1,2,4-Trimethylbenzene	●	OSHA PV2091				10		100		100 min		GC-FID	ST	226-01	35				
1,3,5-Trimethylbenzene (mesitylene)	●	ASTM D 5466				6		varies		varies		GC-MS	CAN	228 Series		PK	228 Series		
1,3,5-Trimethylbenzene (mesitylene)	●	OSHA PV2091				10		100		100 min		GC-FID	ST	226-01	35				
Trimethylolethane trinitrate		OSHA CSI				15		1000		15 min		HPLC-UV	ST	226-35-03	36				
Trimethylolpropane triacrylate		OSHA CSI				10		20(50)		8(3.3)		HPLC-UV	ST	226-95	37				
Trimethyltin dichloride		NIOSH 5526		0.1 mg/m³		60	60	250	1000	4	60	GC-FPD	ST	226-30-16	35				
2,4,7-Trinitro-9-fluorenone		OSHA CSI				480		1000		8		HPLC-UV	FLT C/HLD	225-17A 225-1	74 87	CST	225-3LF	86	
2,4,7-Trinitrofluoren-9-one		NIOSH 5018				480		3000		2.7		HPLC-UV	FLT C/HLD	225-17-04 225-1	74 87	CST	225-3LF	86	
2,4,6-Trinitrotoluene (TNT)		OSHA 44		1.5 mg/m³		60		1000		1		GC-TEA-EAP	ST	226-56	36				
Triorthocresyl phosphate		NIOSH 5037		0.1 mg/m³		90		1000		1.5		GC-FPD	F/CST	225-3-01	77	C/HLD	225-1	87	
Triphenyl phosphate		NIOSH 5038		3 mg/m³		240		1000		4		GC-FPD	F/CST	225-3-01	77	C/HLD	225-1	87	
Triphenyl tin chloride (as Sn)		NIOSH 5527		0.1 mg/m³ (skin)		100-2000		1000-4000		varies		HPLC & ICP-AES	FLT C/HLD	225-8-01-1 225-1	73 87	SP	225-27	87	
Triphenylamine		OSHA CSI				240		1000		4		HPLC-UV	IMP	225-36-2	59	IT	225-22	59	
Triphenyltin fluoride (tin, organic compounds [as Sn])		OSHA CSI		0.1 mg/m³		960		2000		8		AA-GF	F/CST	225-709	79	C/HLD	225-1	87	
Triphenyltin hydroxide (tin, organic compounds [as Sn])		OSHA ID 225SG		0.1 mg/m³		200		2000		100 min		AA-GF	F/CST	225-709	79	C/HLD	225-1	87	
Tripropylene glycol diacrylate		OSHA CSI				10		20(50)		8(3.3)		HPLC-UV	ST	226-95	37				
Tripropylene glycol diacrylate (TPGDA)		NON 39				480		1000		8		GC-FID	ST	226-56	36				
Trydymite (silica, crystalline by VAS)		NIOSH 7601	1041	0.05 mg/m³		400-800		2500		varies		VAS	F/CST CYC	225-803 225-01-02	73 95	C/HLD	225-1	87	
Trypsin		OSHA CSI				480		2000		4		IRA	F/CST	225-1713	74	C/HLD	225-1	87	
Tuberculosis (mycobacterium tuberculosis), airborne		NIOSH 0900				1920		4000		8		PCR	FLT CST	225-2705 225-3LF	74 86	SP C/HLD	225-27 225-1	87 87	
Tungsten (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥		5 mg/m³	10 mg/m³	50-1000	50-1000	1000-4000	1000-4000	varies	varies	ICP-AES	F/CST C/HLD	225-3-01 225-1	or 87	F/CST	225-803	73	
Tungsten (elements by ICP $HNO_3/HClO_4$ ashing)		NIOSH 7300	1455	5 mg/m³	10 mg/m³	5-1000	5-1000	1000-4000	1000-4000	varies	varies	ICP-AES	F/CST	225-3-01	77	C/HLD	225-1	87	
Tungsten & compounds (insoluble) (as W)		OSHA ID 213				480	30	2000	2000	4	15	ICP	F/CST	225-3-01	77	C/HLD	225-1	87	
Tungsten & compounds (soluble) (as W)		OSHA ID 213				480	30	2000	2000	4	15	ICP	F/CST	225-3-01	77	C/HLD	225-1	87	
Tungsten insoluble		NIOSH 7074		5 mg/m³	10 mg/m³	480		1000		8		AA-F	F/CST	225-3-01	77	C/HLD	225-1	87	
Tungsten soluble		NIOSH 7074		1 mg/m³	3 mg/m³	480		1000		8		AA-F	F/CST	225-3-01	77	C/HLD	225-1	87	
Turpentine		NIOSH 1551		100		10		20(50)		8(3.3)		GC-FID	ST	226-01	35				
n-Undecane (hydrocarbons, BP 36 to 216 C)	●	NIOSH 1500		2		2		10 - 50		varies		GC-FID	ST	226-01	35				
Uranium (as U) soluble compounds		OSHA CSI		0.05 mg/m³		960		2000		8		DPCSP	F/CST	225-803	73	C/HLD	225-1	87	
Uranium (insoluble compounds)		OSHA CSI		0.25 mg/m³		960	30	2000	2000	8	15	ICP	F/CST	225-3-01	77	C/HLD	225-1	87	
Uranium (soluble compounds)		OSHA ID 170SG		0.05 mg/m³		240		2000		2		POL	F/CST	225-803	73	C/HLD	225-1	87	
Urea pesticides		ASTM D 4861				240-7200		1000-5000		4 to 24		GC-ECD	PUF	226-92	42				
n-Valeraldehyde		ASTM D 5197				varies		500-1200		5 min to 24 hrs		HPLC-UV	ST	226-120 O	or	ST	226-119	37	
n-Valeraldehyde		NIOSH 2536		50		10		20		8		GC-FID	ST	226-118	37				
n-Valeraldehyde		OSHA 85				3		50		1		HPLC-UV	CF/CST	225-9020	61	C/HLD	225-1	87	

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Agency standards for OSHA listings represent the OSHA PELs reported in the 29 CFR 1910.1000 Part 1910, Section 1000.

References and abbreviations are found on pages 196-197.

Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
n-Valeraldehyde (aldehydes, screening)		NIOSH 2539		50		5		20		4		GC-FID & GC-MS	ST 226-118 37
Vanadium (elements by ICP HNO_3 digestion)		NIOSH 7303			0.05 mg/m³		2.5-500,000		1000-4000		varies	ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Vanadium (elements by ICP HNO_3/$HClO_4$ ashing)		NIOSH 7300	1455		0.05 mg/m³		5-2000		1000-4000		varies	ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Vanadium (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥			0.05 mg/m³		5-2000		1000-4000		varies	ICP-AES	F/CST 225-3-01 or 87 C/HLD 225-1 F/CST 225-803 73
Vanadium (elements on wipes)		NIOSH 9102				wipe						ICP-AES	W 225-2414 124 TMP 225-2415 124 TMP 225-2403 or
Vanadium fume (as V_2O_5)		OSHA ID 125G		0.05 mg/m³	0.1	480	20	2000	1000	4	20	ICP-AES	F/CST 225-3-01 or 87 C/HLD 225-1 F/CST 225-3100 77
Vanadium oxides		NIOSH 7504			0.05 mg/m³ (15 min)	600		2600		4		XRD	F/CST 225-803 73 CYC 225-01-02 95 C/HLD 225-1 87
Vanadium pentoxide (V_2O_5) *(see vanadium oxides)*		NIOSH 7504											
Vanadium pentoxide (V_2O_5) (confirmation of)		OSHA ID 185		0.05 mg/m³	0.05 mg/m³	varies		varies		varies		XRD	F/CST 225-803 73 C/HLD 225-1 87 CYC 225-105 94
Vanadium respirable dust (as V_2O_5)		OSHA ID 125G			0.5 mg/m³		varies		varies		varies	ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87 CYC 225-105 94
Vanadium trioxide *(see vanadium oxides)*		NIOSH 7504											
Vegetable oil mist *(see dust, respirable & total nuisance)*		OSHA CSI											
Vermiculite *(see dust, total & respirable nuisance)*													
Verticillium species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Verticillium species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Vinyl acetate	●	NON 21				24		50		8		GC	ST 226-68 36
Vinyl acetate	●	OSHA 51				24	3	100	200	4	15	GC-FID	ST NA SKC
Vinyl bromide	●	NIOSH 1009		LFC		10		20(50)		8(3.3)		GC-FID	ST 226-09 35
Vinyl bromide	●	OSHA 08	1074			5		20		4		GC-FID	ST 226-01 35
Vinyl chloride	●	ASTM D 4766	1434			24		100 or 50		4 or 8		GC-FID	ST 226-16 35
Vinyl chloride	●	ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
Vinyl chloride	●	NIOSH 1007		LFC		5		50		1.6		GC-FID	ST 226-01 35
Vinyl cyclohexene dioxide		OSHA PV2083				10		20(50)		8(3.3)		GC-FID	ST 226-30 35
Vinyl toluene	●	OSHA 07		100		10		20(50)		8(3.3)		GC-FID	ST 226-01 35
N-Vinyl-2-pyrrolidinone		OSHA PV2106				10		100		100 min		GC-FID	ST 226-01 35
Vinylidene chloride	●	ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
Vinylidene chloride	●	NIOSH 1015		LFC		5		20		4		GC-FID	ST 226-01 35
Vinylidene chloride	●	OSHA 19				3	3	200	200	15 min	15	GC-FID	ST 226-01 35
Viruses (in air)		NON 48				62.5-375		12500 +		5-30		varies	BS 225-9595 105 VT ◊ 225-9598A 105
VM&P naphtha		OSHA 48				3	3	20	200	2.5	15	GC-FID	ST 226-01 35
VM&P naphtha (naphthas)		NIOSH 1550		350 mg/m³	1800 mg/m³	10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
VOCs (volatile organic compounds) (canister) *(see Environmental Sampling Guide)*		EPA IP-1A											
VOCs (volatile organic compounds) (canister) *(see Environmental Sampling Guide)*		EPA TO-14A											
VOCs (volatile organic compounds) (canister) *(see Environmental Sampling Guide)*		EPA TO-15											
VOCs (volatile organic compounds) (passive sampler) *(see Environmental Sampling Guide)*		EPA IP-1B											
VOCs (volatile organic compounds) (passive sampler) *(see Environmental Sampling Guide)*		EPA TO-17											
VOCs (volatile organic compounds) (sample bag) *(see Environmental Sampling Guide)*		EPA 0040											
VOCs (volatile organic compounds) (sorbent tube) *(see Environmental Sampling Guide)*		EPA IP-1B											
VOCs (volatile organic compounds) (sorbent tube) *(see Environmental Sampling Guide)*		EPA TO-17											
VOCs (volatile organic compounds) (VOST) *(see Environmental Sampling Guide)*		EPA 0031											
Volatile organic compounds (screening)		NIOSH 2549				5		20		4		GC-MS	ST 226-330 39
Vydate (oxamyl)		OSHA CSI				60		1000		1		HPLC	ST 226-30-16 35
Wallemia species (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Wallemia species (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Warfarin		NIOSH 5002		0.1 mg/m³		360		1500		4		HPLC-UV	FLT 225-17-01 74 C/HLD 225-1 87 CST 225-2LF 86
Welding fumes (total particulate)		OSHA ID 125G				480		2000		4		ICP-AES	F/CST 225-3-01 or 87 C/HLD 225-1 F/CST 225-3100 77
Wemicide CW 104		OSHA CSI				480		1000		8		HPLC-UV	ST 226-30-16 35
Wollastonite *(see dust, total & respirable nuisance)*		OSHA CSI											
Wood alcohol (methanol)		NIOSH 2000		200	250	5	3	20	200	4	15	GC-FID	ST 226-51 36
Wood dust (except western red cedar)		OSHA CSI				960	30	2000	2000	8	30	GR	FLT 225-8-01 73 CST 225-3LF 86 C/HLD 225-1 87
Wood dust (western red cedar)		OSHA CSI		2.5 mg/m³		960		2000		8		GR	FLT 225-8-01 73 CST 225-3LF 86 C/HLD 225-1 87
Wood dust, hardwood		OSHA CSI		15 mg/m³		960		2000		8		GR	FLT 225-8-01 73 CST 225-3LF 86 C/HLD 225-1 87

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Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Wood dust, softwood		OSHA CSI		15 mg/m³		960		2000		8		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-3LF 86
Wood spirit (methanol)		NIOSH 2000		200	250	5	3	20	200	4	15	GC-FID	ST 226-51 36
m-Xylene	●	ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
m-Xylene		OSHA 1002	1746	100				13.82		8		GC-FID	PS 575-002 64
o-Xylene	●	ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
o-Xylene		OSHA 1002	1746	100				14.24		8		GC-FID	PS 575-002 64
p-Xylene	●	ASTM D 5466				6		varies		varies		GC-MS	CAN 228 Series PK 228 Series
p-Xylene		OSHA 1002	1746	100				13.94		8		GC-FID	PS 575-002 64
m-Xylene (hydrocarbons, aromatic)	●	NIOSH 1501		100		2-23		10-200		varies		GC-FID	ST 226-01 35
o-Xylene (hydrocarbons, aromatic)	●	NIOSH 1501		100	150	2-23	2-23	10-200	10-200	varies	varies	GC-FID	ST 226-01 35
p-Xylene (hydrocarbons, aromatic)	●	NIOSH 1501		100		2-23		10-200		varies		GC-FID	ST 226-01 35
Xylene (o-, m-, & p-isomers)	●	OSHA 07	1186	100		10	3	20(50)	200	8(3.3)	15	GC-FID	ST 226-01 35
Xylene (o-, m-, & p-isomers)	●	OSHA 1002	1746	100		12		50		4		GC-FID	ST 226-01 35
m-Xylenediamine (mXDA)		OSHA 105	1405				15		1000		15	HPLC-UV	CF/CST 225-9004 61 C/HLD 225-1 87
p-Xylenediamine (pXDA)		OSHA 105	1405				15		1000		15	HPLC-UV	CF/CST 225-9004 61 C/HLD 225-1 87
Xylidine		OSHA CSI		5		24		50		8		GC-FID	ST 226-10 35
2,4-Xylidine (amines, aromatic)		NIOSH 2002	1056	2		10		20(50)		8(3.3)		GC-FID or GC-NSD	ST 226-10 35
Yeast (fungi, molds, spores)		OSHA CSI				120		1000		2		varies	F/CST 225-3-01 77 C/HLD 225-1 87
Yeast (fungi, molds, spores)		OSHA CSI				141.5		28,300		5 min		varies	BI 225-9611 103
Yttrium		OSHA ID 121		1 mg/m³		960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Yttrium (elements by ICP HNO_3 digestion)		NIOSH 7303				0.1-50,000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Yttrium (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥				5-1000		1000-4000		varies		ICP-AES	F/CST 225-3-01 or 87 F/CST 225-803 73 C/HLD 225-1
Yttrium (elements by ICP HNO_3/$HClO_4$ ashing)		NIOSH 7300	1455			5-1000		1000-4000		varies		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Yttrium (elements on wipes)		NIOSH 9102				wipe						ICP-AES	W 225-2414 124 TMP 225-2403 or TMP 225-2415 124
Zectran		OSHA CSI										W	W 225-2401A 124
Zinc		OSHA ID 121	1204			960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Zinc		OSHA ID 125G				480		2000		4		ICP-AES	F/CST 225-3-01 or 87 F/CST 225-3100 77 C/HLD 225-1
Zinc (elements by ICP Aqua Regia ashing)		NIOSH 7301 ¥				5-200		1000-4000		varies		ICP-AES	F/CST 225-3-01 or 87 F/CST 225-803 73 C/HLD 225-1
Zinc (elements by ICP HNO_3 digestion)		NIOSH 7303		5 mg/m³ (ZnO)	15 mg/m³ (ZnO)	0.5-10,000	0.5-10,000	1000-4000	1000-4000	varies	varies	ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Zinc (elements by ICP HNO_3/$HClO_4$ ashing)		NIOSH 7300	1455	5 mg/m³ (ZnO)	10 mg/m³ (ZnO)	5-200	5-200	1000-4000	1000-4000	varies	varies	ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Zinc (elements on wipes)		NIOSH 9102				wipe						ICP-AES	W 225-2414 124 TMP 225-2403 or TMP 225-2415 124
Zinc & compounds (as Zn)		NIOSH 7030		5 mg/m³ (ZnO)	15 mg/m³ (ZnO)	240	30	1000	2000	4	15	AA-F	F/CST 225-3-01 77 C/HLD 225-1 87
Zinc bromide *(see dust, total & nuisance)*													
Zinc chloride fume		OSHA ID 121	1207	1 mg/m³		960	30	2000	2000	8	15	AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87
Zinc chloride fume		OSHA ID 125G		1 mg/m³		480	30	2000	2000	4	15	ICP-AES	F/CST 225-3-01 or 87 F/CST 225-3100 77 C/HLD 225-1
Zinc chromate (CR(VI))		OSHA ID 215 (V2)	1439	0.005 mg/m³		960		2000		8		IC-UV	F/CST 225-802 Ω 73 C/HLD 225-1 87
Zinc chromates (as CrO_3)		OSHA ID 215 (V2)	1439	0.005 mg/m³		960		2000			15	IC-UV	F/CST 225-802 Ω 73 C/HLD 225-1 87
Zinc dibutyldithiocarbamate		OSHA PV2065				180		1000		3		HPLC-UV	ST 226-30-16 35
Zinc oxide		NIOSH 7502		5 mg/m³	15 mg/m³ (15 min)	240	30	1000	2000	4	15	XRD	FLT 225-807 73 CST 225-3-23 86
Zinc oxide (elements by ICP HNO_3 digestion)		NIOSH 7303		5 mg/m³	15 mg/m³	0.5-10,000	0.5-10,000	1000-4000	1000-4000	varies	varies	ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Zinc oxide (particulates, respirable)		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-01-02 95 CST 225-3LF 86
Zinc oxide (particulates, total)		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Zinc oxide dust *(see dust, total & respirable)*		OSHA CSI											
Zinc oxide fume		OSHA ID 121		5 mg/m³		960	30	2000	2000	8	15	AA or AES	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Zinc oxide fume		OSHA ID 125G		5 mg/m³		480	30	2000	2000	4	15	ICP-AES	F/CST 225-3-01 or 87 F/CST 225-3100 77 C/HLD 225-1
Zinc oxide fume		OSHA ID 143		5 mg/m³		960	30	2000	2000	8	15	XRD	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Zinc oxide fume (ICP analysis of metal/metalloid particulates from solder operations)		OSHA ID 206		5 mg/m³		480		2000		4		ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Zinc stearate (particulates, respirable)		NIOSH 0600	1038			375		2500		2.5		GR	FLT 225-8-01 73 C/HLD 225-1 87 CYC 225-01-02 95 CST 225-3LF 86
Zinc stearate (particulates, total)		NIOSH 0500	1035			120		2000		1		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-2LF 86
Zinc stearate (respirable dust)		OSHA CSI		5 mg/m³		912		1900		8		GR	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-3LF 86
Zinc stearate (total dust)		OSHA ID 121		15 mg/m³		960		2000		8		AA or AES	F/CST 225-3-01 77 C/HLD 225-1 87

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Chemical Hazard	Passive Guide	Agency Reference	Chem F File	SAMPLING ∞ Agency Standard TWA (ppm)	Agency Standard CLG/STEL (ppm)	Vol. (liter) TWA	Vol. (liter) CLG/STEL	Rate (ml/min) TWA	Rate (ml/min) CLG/STEL	Time TWA (hrs)	Time CLG/STEL (ppm)	Analytical Method	SKC Collecting Equipment & Page Number
Zinc stearate (total dust)		OSHA ID 125G		15 mg/m³		480		2000		4		ICP-AES	F/CST 225-3-01 or F/CST 225-3100 77 C/HLD 225-1 87
Zineb		OSHA 107				500		2000		250 min		HPLC-UV	F/CST 225-3-01 77 C/HLD 225-1 87
Ziram		OSHA PV2073				120		1000		2		HPLC-UV	ST 226-30-16 35
Zirconium (elements by ICP Aqua Regia ashing)		NIOSH 7301‡		5 mg/m³	10 mg/m³	5-200	5-200	1000-4000	1000-4000	varies	varies	ICP-AES	F/CST 225-3-01 or F/CST 225-803 73 C/HLD 225-1 87
Zirconium (elements by ICP HNO_3/$HClO_4$ ashing)		NIOSH 7300	1455	5 mg/m³	10 mg/m³	5-200	5-200	1000-4000	1000-4000	varies	varies	ICP-AES	F/CST 225-3-01 77 C/HLD 225-1 87
Zirconium (elements on wipes)		NIOSH 9102				wipe						ICP-AES	W 225-2414 124 TMP 225-2403 or TMP 225-2415 124
Zirconium compounds (as Zr)		OSHA ID 121		5 mg/m³		960	30	2000	2000	8	15	AA or AES	FLT 225-8-01 73 C/HLD 225-1 87 CST 225-3LF 86

Symbols and Notes

∞ ..... *The sampling parameters shown are suggestions based on the ranges of volume, flow, and time specified in the methods. It is the responsibility of the analyst performing the sampling and analysis to adjust parameters so that the required detection limits can be obtained. It is the responsibility of the user to research published methods to determine validation level and suitability for unique applications.*

C ..... *Ceiling Value*

CSI ..... *OSHA Chemical Sampling Information*

EL ..... *Excursion Limit*

LFC ..... *NIOSH standard: Lowest Feasible Concentration*

LOQ ..... *Limit of Quantitation*

NA SKC ..... *Not available from SKC*

NON ..... *Non-agency reference*

NVM ..... *No validated method*

OEL ..... *U.S. Army Occupational Exposure Limit*

OR-OSHA ..... *Oregon OSHA method and target concentrations*

PV ..... *Provisional Method*

Special order ..... *Because of limited shelf-life, certain sampling media are available only as special order items.*

** ..... *Optional, use filter if particulates are present*

‡ ..... *Filter or tube must be chemically treated before sampling.*

♠ ..... *Modified procedure or sampler*

◊ ..... *Other collection liquids may be more suited to target microorganisms.*

¥ ..... *This method does not digest PVC filters (Cat. No. 225-803) completely.*

Δ ..... *1.0-micron PTFE filter is a NIOSH recommended substitute filter for the 0.8-micron PVC filter originally recommended in NIOSH Method 7904.*

Σ ..... *Use an oxidizer tube if sulfur dioxide is present.*

+ ..... *Sonic flow*

° ..... *Use sorbent tube Cat. No. 226-120 when sampling in atmospheres containing ozone.*

†† ..... *Special order/limited shelf-life; contact SKC*

▼ ..... *The MOPIP Derivatizing Solution, Cat. No. 225-9050, is needed to analyze for monomer/oligimer aerosol.*

Ω ..... *For sampling in chromium plating operations, PVC filters (Cat. No. 225-802) require special treatment after receipt at the laboratory. Alternatively quartz fiber filters (Cat. No. 225-1827) treated with NaOH may be used. Refer to the method for details.*

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