



EMSL Badge Sampling Guide



Analyte	Method	Sampling Rate (ml/min)	Badge	EMSL Stock #	Recommended Sample Time (hr.)
Acetone (dimethyl ketone)	NIOSH 1300	40.1	3M 3520	87IH070	2
Acetone (dimethyl ketone)	NIOSH 2016	16.2	Assay 571	87IH034	8+
Acetaldehyde	NIOSH 2016	11.7	Assay 571	87IH034	8+
Acetonitrile	NIOSH 1606	48.2	3M 3520	87IH070	2
Acrolein	NIOSH 2016	16.2	Assay 571	87IH034	8+
Acrylonitrile	NIOSH 1604	43.8	3M 3520	87IH070	8(m)
Benzaldehyde	NIOSH 2016(mod)	6.97	Assay 571	87IH034	8+
Benzene	NIOSH 1500/1501	35.5	3M 3500	87IH069	8
Benzyl chloride (alpha-chlorotoluene)	NIOSH 1003	27.2	3M 3500	87IH069	8
1-Bromopropane (propyl bromide)	OSHA PV2061	31.7	3M 3500	87IH069	(m)
1,3-Butadiene	NIOSH 1024	42.8	3M 3520	87IH070	(m)
2-Butoxyethanol	NIOSH 1403	28.2	3M 3500	87IH069	8
tert-Butyl acetate	NIOSH 1400	29.4	3M 3500	87IH069	8
sec-Butyl acetate	NIOSH 1450	28.6	3M 3500	87IH069	8
n-Butyl acetate	NIOSH 1450	31.6	3M 3500	87IH069	8
n-Butyl alcohol (n-butanol)	NIOSH 1401	34.3	3M 3500	87IH069	8
sec-Butyl alcohol (sec-butanol)	NIOSH 1401	34.8	3M 3500	87IH069	8
tert-Butyl alcohol (tert-butanol)	NIOSH 1400	35.2	3M 3500	87IH069	8
Butyl glycidyl ether	NIOSH 1616/CSI	27	3M 3500	87IH069	8
Butyraldehyde	NIOSH 2016 (mod)	8.2	3M 3500	87IH069	8
Carbon tetrachloride	NIOSH 1003	30.2	3M 3500	87IH069	8
Chlorobenzene	NIOSH 1003	29.3	3M 3500	87IH069	8
Chloroform (trichloromethane)	NIOSH 1003	33.5	3M 3500	87IH069	8
Cumene (isopropylbenzene)	NIOSH 1501	24.5	3M 3500	87IH069	8
Cyclohexane	NIOSH 1500	32.4	3M 3500	87IH069	6
Cyclohexanone	NIOSH 1300	28.9	3M 3500	87IH069	8
Cyclopentane	NIOSH 1500	36.2	3M 3520	87IH070	1
Diacetone alcohol	NIOSH 1402	28.2	3M 3500	87IH069	8
1,2-Dichloroethylene (cis)	NIOSH 1003	35.2	3M 3500	87IH069	6
1,2-Dichloroethylene (trans)	NIOSH 1003	35.2	3M 3500	87IH069	6
p-Dichlorobenzene (1,4 isomer)	NIOSH 1003	27.8	3M 3500	87IH069	8
o-Dichlorobenzene (1,2 isomer)	NIOSH 1003	27.8	3M 3500	87IH069	8
1,1-Dichloroethane (ethylidene chloride)	NIOSH 1003	33.2	3M 3500	87IH069	8
1,2-Dichloroethane (ethylene dichloride)	NIOSH 1003	33.2	3M 3500	87IH069	8
Diethyl ether (Ethyl ether)	OSHACSI	36.8	3M 3520	87IH070	4
Diethyl ketone	NIOSH 1301	32.7	3M 3500	87IH069	8
Diisobutylketone	NIOSH 1300	24.6	3M 3500	87IH069	8
Dipropylketone(4-heptanone)	NIOSH 1300	27.8	3M 3500	87IH069	8
Ethanol (ethyl alcohol)	NIOSH 1400	43.7	3M 3520	87IH070	1
Ethyl Acetate	NIOSH 1457	34.5	3M 3500	87IH069	6
Ethyl Amyl Ketone	NIOSH 1300	26.4	3M 3500	87IH069	8



EMSL Badge Sampling Guide



Analyte	Method	Sampling Rate (ml/min)	Badge	EMSL Stock #	Recommended Sample Time (hr.)
Ethylbenzene	NIOSH 1501	27.3	3M 3500	87IH069	8
Ethyl butyl ketone	NIOSH 1301	28	3M 3500	87IH069	8
Ethylether(diethylether)	OSHA CSI	36.8	3M 3520	87IH070	4
Formaldehyde	NIOSH 2016 (mod)	16.2	Assay 571	87IH034	8+
Glutaraldehyde	NIOSH 2016 (mod)	7.24	Assay 571	87IH034	8+
Heptane	NIOSH 1499	28.9	3M 3500	87IH069	8
n-hexane	NIOSH 1500	32	3M 3500	87IH069	8
Hexane Isomers	NIOSH 1500	32	3M 3500	87IH069	7
Hydrogen Peroxide (H2O2)	OSHA VI-6	11.7	Assay 587	Special Order	8
Isoamyl acetate	NIOSH 1450	27.2	3M 3500	87IH069	8
Isoamyl alcohol	NIOSH 1402	32.3	3M 3500	87IH069	8
Isobutyl alcohol (2-methyl-1-propanol)	NIOSH 1401	35.9	3M 3500	87IH069	8
Isoflurane (Forane)	OSHA CSI	28.3	3M 3520	87IH070	8
Isopropyl alcohol	NIOSH 1400	39.4	3M 3520	87IH070	(m)
Mercury	NIOSH 6009	20	SKC 520 Capsule/ Holder	87IH083 / 87IH084	8+
2-Methoxyethanol	NIOSH 1403	36.3	3M 3500	87IH069	8
Methyl cyclohexane	NIOSH 1500	28.9	3M 3500	87IH069	7
Methyl ethyl ketone (2-butanone or MEK)	NIOSH 2500	36.3	3M 3500	87IH069	8
Methylene chloride	NIOSH 1005	37.9	3M 3520	87IH070	(m)
Methyl isoamyl ketone (MIAK)	NIOSH 1300	28	3M 3500	87IH069	8
Methyl isobutyl ketone (4-methyl-2-pentanone)	NIOSH 1300	30	3M 3500	87IH069	8
Methyl methacrylate	NIOSH 2537	31.8	3M 3500	87IH069	8
Methyl propyl ketone (2-pentanone)	NIOSH 1300	33	3M 3500	87IH069	8
1-Methyl-2-pyrrolidinone		28.8	3M 3500	87IH069	8
Methyl tert-butyl ether (MTBE)	NIOSH 1615	30.8	3M 3500	87IH069	8
Naphthalene	NIOSH 1501	24.6	3M 3500	87IH069	8
Nitrous Oxide (N2O)	GC/ECD	1.25	Prepaid Assay 575	Special Order	8
n-Octane	NIOSH 1500	26.6	3M 3500	87IH069	8
Pentane	NIOSH 1500	35.3	3M 3520	87IH070	3
Perchloroethylene (tetrachloroethylene)	NIOSH 1003	28.3	3M 3500	87IH069	8
Petroleum ether	NIOSH 1550	33.2	3M 3500	87IH069	8
Petroleum naphtha	NIOSH 1550	33.2	3M 3500	87IH069	8
Propionaldehyde	NIOSH 2016	9.58	Assay 571	87IH034	8+
n-Propyl acetate	NIOSH 1450	30.1	3M 3500	87IH069	8
n-Propyl alcohol	NIOSH 1401	39.7	3M 3500	87IH069	6
Propylene glycol, monomethyl ether acetate (PGMEA)	OSHA CSI	32.4	3M 3500	87IH069	8
Propylene glycol monomethyl ether (PGME)	OSHA CSI	25.2	3M 3500	87IH069	8



EMSL Badge Sampling Guide



Analyte	Method	Sampling Rate (ml/min)	Badge	EMSL Stock #	Recommended Sample Time (hr.)
Resorcinol	OSHA CSI	25.8	3M 3500	87IH069	
Stoddard Solvent	NIOSH 1550	24.3	3M 3500	87IH069	8
Styrene	NIOSH 1501	28.9	3M 3500	87IH069	8
Tetrachloroethylene (tetrachloroethene)	NIOSH 1003	28.3	3M 3500	87IH069	8
Tetrahydrofuran (THF)	NIOSH 1609	37.2	3M 3500	87IH069	8
Toluene	NIOSH 1501	31.4	3M 3500	87IH069	8
Total Petroleum Hydrocarbons (as Naphtha)	NIOSH 1550	33.2	3M 3500	87IH069	8
Total Petroleum Hydrocarbons (as Gasoline)	NIOSH 1550	30.5	3M 3500	87IH069	8
1,1,2-Trichloroethane	NIOSH 1003	29.7	3M 3500	87IH069	8
1,1,1-Trichloroethane	NIOSH 1003	30.9	3M 3520	87IH070	(m)
Trichloroethylene	NIOSH 1003	31.1	3M 3500	87IH069	8
1,1,2-trichloro-1,2,2-trifluoroethane	NIOSH 1020	29.1	3M 3520	87IH070	1
1,2,3-Trichloropropane	NIOSH 1003	27.4	3M 3500	87IH069	8
Vinyl acetate	NIOSH 1453	35.8	3M 3500	87IH069	8
Vinyl chloride	NIOSH 1007	40.8	3M 3520	87IH070	(m)
VM+P Naphtha	NIOSH 1550	33.2	3M 3500	87IH069	8
o-Xylene	NIOSH 1501	27.3	3M 3500	87IH069	8
m,p-Xylene	NIOSH 1501	27.3	3M 3500	87IH069	8
Aldehyde Scan: Acetaldehyde, Acetone, Acrolein, Benzaldehyde, Butyraldehyde, Crotonaldehyde, Formaldehyde, Propionaldehyde	NIOSH 2016 (mod)	See Compound	Assay 571	87IH034	8+
Volatile Organic Scan by GC/FID (20 + compounds): Benzene, 1-Butanol, 2-Butanol, Carbon tetrachloride, Chlorobenzene, Chloroform, 1,2- Dichloroethane, 1,2- Dichloropropane, 1,2-Dichlorobenzene, Ethyl acetate, Ethylbenzene, 2-Hexanone, 2-Heptanone, Naphthalene, 1,1,2,2-Tetrachloroethane, Tetrachloroethylene, Toluene, m- Xylene, o-Xylene, p-Xylene	Multiple NIOSH	See Compound	3M 3520	87IH070	8
Waste Anesthetic Gases: Desflurane, Enflurane, Halothane, Isoflurane, Methoxyflurane, Sevoflurane	OSHA CSI	28.3	3M 3520	87IH070	8

(m) = Sample time limited