TABLE 3. MAXIMUM ALLOWABLE CONCENTRATION OF GASES AND VAPORS

SUBSTANCE	ASA STANDARDS M.A.C. ppm by volume	THRESHOLD LIMIT VALUES *A.C.G.I.H.*[a] 1954		
		ppm	Gm/cu m or Oz/1000 cu ft	Oz/1000 cu ft[b]
Acetaldehyde		200	0.36	0.43
Acetic acid		10	0.02554	0.02
Acetic anhydride		5	0.02085	0.02
Acetone		1000	2.4130	2.42
Acrolein		0.5	0.1145	0.013
Acrylonitrile		20	0.04336	0.05
Ammonia		100	0.069	
Amyl acetate		200	1.064	1.16
Amyl alcohol (iso)		100	0.36	0.41
Aniline		5	0.019	0.02
Arsine		0.05		
Benzene (benzol)	100	35	0.11393	0.12
Bromine		1	0.00653	0.03
1,3-Butadiene		1000	2.210	3.3
n-Butanol		100	0.3030	0.36
2-Butanone		250	0.735	0.88
n-Butyl acetate		200	0.948	1.04
Butyl "cellosolve" (2 butoxyethanol)		200	0.966	1.02
Carbon dioxide		5000		
Carbon disulfide	20	20	0.0622	0.05
Carbon *monoxide*	100	100		
Carbon tetrachloride		25	0.157	0.095
"Cellosolve" (2-ethoxyethanol)		200	0.736	0.76
"Cellosolve" acetate		100	0.54	0.53
Chlorine		1		
Chlorobenzene		75	0.3465	0.3
2-Chlorobutadiene		25	0.0905	0.09
Chloroform		100	0.488	0.31
1-Chloro-1-nitropropane		20	0.101	0.08
Cresol		5	0.022	0.02
Cyclohexane		400	1.375	1.69
Cyclohexanol		100	0.409	0.42
Cyclohexanone		100	0.401	0.41
Cyclohexene		400	1.34	1.58
Cyclopropane (propane)		400	0.6875	0.91
1-2 Dibromoethane (ethylene dibromide)		25		
o-Dichlorobenzene		50	0.3005	0.24
Dichlorodifluoromethane		1000	4.94	3.18
1,1-Dichloroethane		100	0.405	0.33
1,2-Dichloroethane (ethylene dichloride)		100	0.4051	0.31
1,2-Dichloroethylene		200	0.794	0.59
Dichloroethyl ether		15	0.0878	0.08
Dichloromethane		500	1.74	1.25
Dichloromonofluormethane		1000	4.20	2.83
1,1-Dichloro-1-Nitroethane		10	0.0589	0.4
1,2-Dichloropropane (propylene dichloride)		75	0.3265	0.29
Dichlorotetrafluoroethane		1000	6.98	4.36
Diethyl amine		25	0.045	0.07
Dimethylaniline		5	0.02475	0.02
Dimethylsulfate		1	0.00515	0.003
Dioxane		100	0.36	0.33
Ethyl acetate		400	1.44	1.52
Ethyl alcohol		1000	1.881	2.2
Ethyl amine		25		
Ethyl benzene		200	0.868	0.96
Ethyl bromide		200	0.892	0.59
Ethyl chloride		1000	2.64	2.75
Ethylene chlorhydrin		5	0.01645	0.015
Ethylene oxide		100	0.18	0.09
Ethyl ether		400	1.212	1.67
Ethyl formate		100	0.303	0.315
Ethyl silicate		100	0.851	0.87
Fluorine		0.1		
Fluorotrichloromethane		1000	5.62	3.7
Formaldehyde	10	5	0.006135	
Gasoline		500	2.045	2.89
Heptane		500	2.05	2.87

TABLE 3. MAXIMUM ALLOWABLE CONCENTRATION OF GASES AND VAPORS (Concluded)

SUBSTANCE	ASA STANDARDS M.A.C. ppm by volume	THRESHOLD LIMIT VALUES *A.C.G.I.H.*[a] 1954		
		ppm	Gm/cu m or Oz/1000 cu ft	Oz/1000 cu ft[b]
Hexane		500	1.76	2.54
Hydrogen chloride		5	0.00746	0.004
Hydrogen cyanide		10	0.01104	0.015
Hydrogen fluoride		3	0.00245	0.003
Hydrogen selenide		0.05		
Hydrogen sulfide	20	20		
Iodine		1	0.01039	0.0002
Isophorone		25	0.141	0.15
Isopropyl alcohol		400	1.022	1.22
Isopropyl ether		500	2.085	2.75
Mesityl oxide		50	0.2005	0.22
Methyl acetate		200	0.606	0.62
Methyl alcohol	200	200	0.2618	0.32
Methylal		1000	3.11	3.5
Methyl bromide		20	0.0778	0.04
Methyl *butyl* ketone (hexanone)		100	0.352	0.41
Methyl "cellosolve" (2-methoxyethanol)		25	0.7775	0.078
Methyl "cellosolve" acetate		25	0.1208	0.11
Methyl chloride	100	100	0.2086	0.22
Methyl chloroform (1-1-1 trichloroethane)		500		
Methylcyclohexane		500	2.005	2.44
Methylcyclohexanol		100	0.466	0.49
Methylcyclohexanone		100	0.458	0.48
Methyl formate		100	0.2554	0.25
Methyl iso-butyl ketone		100	0.409	0.49
Monochlorobenzene		75	0.3465	0.3
Monofluorotrichloromethane		1000	5.61	3.59
Naphtha (coal tar)		200	0.638	0.71
Naphtha (petroleum)		500	1.945	2.6
Nickel carbonyl		1	0.00697	0.006
Nitrobenzene		1	0.00503	0.004
Nitroethane		100	0.307	0.275
Nitrogen dioxide		5		
Nitrogen oxides (other than nitrous oxide)	25	25[c]		
Nitroglycerine		0.5	0.00464	0.003
Nitromethane		100	0.2495	0.21
2-Nitropropane		50	0.182	0.17
Nitrotoluene		5	0.028	0.23
Octane		500	2.33	3.17
Ozone		0.1		
Pentane		1000	2.94	4.5
Pentanone (methyl propanone)		200	0.704	0.82
Phenol		5		
Phosgene		1		
Phosphine		0.05		
Phosphorus trichloride		0.5	0.00281	0.0018
Propyl acetate		200	0.834	0.885
Stibine		0.1		
Stoddard solvent		500	2.845	3.4
Styrene monomer	400	200	0.85	0.89
Sulfur chloride		1	0.00552	0.003
Sulfur dioxide		10		
1,1,2,2-Tetrachloroethane		5	0.343	0.02
Tetrachloroethylene (perchloroethylene)		200	1.358	0.810
Toluene	200	200	0.752	0.83
Toluidine		5	0.0219	0.02
Trichloroethylene	200	200	1.072	0.70
Turpentine		100	0.556	0.58
Vinyl chloride		500	1.28	1.33
Xylene	200	200	0.868	0.96

[a] *A.C.G.I.H.* = *American Conference of Governmental Industrial Hygienists.*

[b] Liquid ounces (at 20 C) of chemical in 1000 cu ft.

[c] From 1953 list.