

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.* 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	0.02035	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
Dichloromonofluoromethane.....		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	8.98	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	0.551	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.* 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.....		0.001	0.000007	0.000006
Nitrobenzene.....		1		
Nitroethane.....		100	0.00503	0.004
Nitrogen dioxide.....		5	0.307	0.275
Nitrogen oxides (other than nitrous oxide).....				
Nitroglycerine.....	25	25 ^c		
Nitromethane.....		0.5	0.00464	0.003
2-Nitropropane.....		100	0.2495	0.21
Nitrotoluene.....		50	0.182	0.17
Octane.....		5	0.028	0.23
Ozone.....		500	2.33	3.17
Pentane.....		0.1		
Pentanone (methyl propanone).....		1000	2.94	4.5
Phenol.....		200	0.704	0.82
Phosgene.....		5		
Phosphine.....		1		
Phosphorus trichloride.....		0.05		
Propyl acetate.....		0.5	0.00281	0.0018
Stibine.....		200	0.834	0.885
Stoddard solvent.....		0.1		
Styrene monomer.....		500	2.845	3.4
Sulfur chloride.....	400	200	0.85	0.89
Sulfur dioxide.....		1	0.00552	0.003
1,1,2,2-Tetrachloroethane.....		10		
Tetrachloroethylene (perchloroethylene).....		5	0.343	0.02
Toluene.....		200	1.358	0.810
Toluidine.....	200	200	0.752	0.83
Trichloroethylene.....		5	0.0219	0.02
Turpentine.....	200	200	1.072	0.70
Vinyl chloride.....		100	0.556	0.58
Xylene.....	200	500	1.28	1.33
		200	0.868	0.96

* 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.