

ADEQUACY OF TECHNOLOGY FOR POLLUTION ABATEMENT 185

AIR QUALITY CRITERIA FOR OTHER CHEMICAL SUBSTANCES
(Values in ppm* Unless Otherwise Noted)

SUBSTANCE	Hygienic Standards For Daily Occupational Inhalation			Short Occupational Exposure Limits	Immediately Hazardous to Life	Emergency Occupational Exposure Limits		
	T L V ' s					Exposure Time - Minutes		
	TLV (1)	"C" Values (1)	Peak Values			10	30	60
Acetone (acclimated) (Unacclimated)	1,000 (500)		2,000 1,000	4,000 2,000	Unknown - Similar to ethyl alcohol except narcotic effects are somewhat greater.			
Anhydrous Ammonia	50		100	400 (2) 100 (10)	5,000-10,000 (2) (10) 20,000 (2)	-	-	-
Benzene (benzol)-Skin		25				-	-	-
Beryllium (occupational)	0.002 mg/m ³			0.025 mg/m ³ for < 30 min (3)		-	-	-
Beryllium (non-occupational)	0.00001 mg/m ³					-	-	-
Soluble compounds NaO						-	-	-
2-Butanone (methyl ethyl ketone)	200		300	500 (10) (14)	0.025 mg/m ³ for 30 minutes with a minimum interval of 2-weeks (11) 0.05 mg/m ³ for 30 minutes with a minimum interval of 2-weeks (11) Unknown - but probably > 10,000 (3) marked irritating properties should prevent ill effects.			
Butyl Acetate	150		200	400	Unknown, but rats died when exposed for 8 hrs to saturated air at 2,000. (14)			
Butyl Alcohol (N-Butanol)	100		200	300	Unknown, but saturated air at 65°F has a concentration of 6,200 where marked narcosis and irritation is experienced.			
Carbon Dioxide	5,000			50,000 (2)	100,000 (2)	-	-	-
Carbon Disulfide-Skin	20			50	4,815 fatal in 4-hr (3)	200	100	50
Carbon Monoxide				400	5,000 (3)	1500	800	400
Normal Mental Acuity	50			200	5,000 (3)	1000	500	200
Carbon Tetrachloride-Skin	10		25	75	Unknown, but 1000-2000 for 1-1 hr resulted in fatalities. (3)			
Chlorine		1		4	1,000 (2)	-	-	-
Chloroform (trichloromethane)	200		400	800	Unknown, but probably 2-3% (17)			
o-Dichlorobenzene		50		200	Unknown, but 14,000-16,000 will cause rapid loss of consciousness (3).			
1,2-Dichloroethane (ethylene dichloride)	50		100	200	Unknown, but saturated air at 77°C has a concentration of only 2,000.			
1,3-Dichloroethylene	500		1,000	2,500	Unknown, but % concentrations probably required to produce fatal results.			
Diisobutyl Ketone	50		100	200	Unknown, but rats were anesthetized in 8 min at 10,000 and killed in 4 hrs.			
Ethyl Acetate (acclimated)	400		800	800	Unknown, but irritating properties at 500 ppm can only be tolerated for more than a few min. (3)			
(Unacclimated)	200		400	500	Saturated air of 65°F has a concentration of 1,500.			
Ethyl Alcohol (Ethanol)	1,000		2,000	5,000	Unknown, but 1-2% dangerous for short exposures. (14)			
Ethyl Ether	400		500	800	Unknown, but 6,000 to 9,000 is initially intolerable to the unacclimated subject. (14)			
Ethylene Glycol					Unknown, but 35,000 anesthetizes in 30 min. (14)			
Formaldehyde		5			100,000 may be fatal. (3)			
Gasoline	500		1,000	2,000	Unknown, but anesthetic death probable at 20,000-30,000. (18)			
Hydrogen Chloride		5		10	1000-2000 (3)	20	20	10

FIGURE 6