

TOXIC DUSTS, FUMES, AND MISTS (continued)

Substance	mg. per cu. m.*
Phosphorus pentasulfide	1
Picric acid	0.1
* Pyrethrum	2
* Rotenone	5
Selenium compounds (as Se)	0.1
Sodium hydroxide	2
* Sodium fluoroacetate (1080)	0.1
* Strychnine	0.15
Sulfuric acid	1
TEDP (tetraethyl dithionopyrophosphate)	0.2
TEPP (tetraethyl pyrophosphate)	0.05
Tellurium	0.1
Tetryl (2,4,6-trinitrophenylmethyl nitramine)	1.5
* Thallium (soluble compounds)	0.1
* Thiram (tetramethyl thiuram disulfide)	5
Titanium dioxide	15
Trichloronaphthalene	5
Trinitrotoluene	1.5
Uranium	
(soluble compounds)	0.05
(insoluble compounds)	0.25
Vanadium	
(V ₂ O ₅ dust)	0.5
(V ₂ O ₅ fume)	0.1
* Warfarin (3-[α -acetylbenzyl]-4-hydroxycoumarin)	0.5
Zinc oxide fumes	15
Zirconium compounds (as Zr)	5

Radioactivity: For permissible concentrations of radioisotopes in air, see *Maximum Permissible Amounts of Radioisotopes in the Human Body and Maximum Permissible Concentrations in Air and Water*, Handbook 52, U. S. Department of Commerce, National Bureau of Standards, March, 1953. In addition, see *Permissible Dose from External Sources of Ionizing Radiation*, Handbook 59, U. S. Department of Commerce, National Bureau of Standards, September 24, 1954.

Revision of the two publications mentioned above is in progress.

MINERAL DUSTS

Substance	m.p.p.c.†
Aluminum oxide	50
Asbestos	5
Dust (nuisance, no free silica)	50
Mica (below 5% free silica)	20
Portland cement	50
Talc	20
Silica	
high (above 50% free SiO ₂)	5
medium (5 to 50% free SiO ₂)	20
low (below 5% free SiO ₂)	50
Silicon carbide	50
Soapstone (below 5% free SiO ₂)	20

TENTATIVE VALUES

Substance	p.p.m.*	Approx. mg. per cu. m.†
Acetylene tetrabromide	1	14
Alkyl glycidyl ether (AGE)	10	45
Beryllium		2 γ /m.‡
Boron trifluoride	1	3
Butyl glycidyl ether (BGE)	50	270
Butyl mercaptan	10	35
Chloroacetaldehyde	1	3
Chlorobromomethane (Cl Br CH ₃)	400	2,100
Diglycidyl ether (DGE)	10	55
Dimethyl formamide	20	60
Dipropylene glycol methyl ether	100	600
Ethyl mercaptan	250	640
Ethyl alcohol	50	200
Glycidol	50	150
Isopropyl glycidyl ether (IGE)	50	240
Lithium hydride		25 γ /m.‡
Methyl mercaptan	50	100
Methyl styrene	100	480
Monomethyl aniline	2	9
Paradichlorobenzene	75	450
Perchloromethyl mercaptan	0.1	0.8
Phenyl glycidyl ether (PGE)	50	310
Propylene oxide	100	240
Secondary butyl alcohol	100	300
Tetrolene-2,4-diisocyanate	0.1	0.7
Tertiary amine	25	100
Vinyl chloride	100	480
Various inorganic compounds		5
Xylylene	5	25
Deion decomposition products	0	0
Pentaborane (B ₅ H ₉)	0	0

* These values appeared on the tentative list for 1956.

† Until more data are forthcoming, it is important that atmospheric concentrations of these materials to which workers are exposed must be kept as near 0 as possible.

‡ Parts of vapor or gas per million parts of air by volume.

§ Approximate milligrams per cubic meter of air.

¶ Milligrams of dust, fume, or mist per cubic meter of air.

‡ Millions of particles per cubic foot of air.

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The American Standards Association has for several years been attempting to establish standards for health and safety, and in 1936 it set up an advisory committee which was reorganized in 1938 as a working committee to "determine, establish, and promulgate the allowable concentration limits of harmful gases, vapors, fumes, dusts, and mists." The relatively small number of standards for air