

TABLE 2-1-A. Limits For Air Contaminants

Substance	CAS No.	Transitional Limits			Skin Designation	Final Rule Limits ^a						Skin Designation	
		PEL ^b		b		TWA		STEL ^c		CEILING			b
		ppm ^a	mg/m ³			ppm ^a	mg/m ³	ppm ^a	mg/m ³	ppm ^a	mg/m ³		
Acetaldehyde	75-07-0	200	360	-	100	180	150	270	-	-	-	-	
Acetic acid	64-19-7	10	25	-	10	25	-	-	-	-	-	-	
Acetic anhydride	108-24-7	5	20	-	-	-	-	-	5	20	-	-	
Acetone	67-64-1	1000	2400	-	750	1800	1000	2400	-	-	-	-	
Acetonitrile	75-05-8	40	70	-	40	70	60	105	-	-	-	-	
2-Acetylaminofluorine; see 1910.1014	53-96-3												
Acetylene dichloride; see 1,2-Dichloroethylene													
Acetylene tetrabromide	79-27-6	1	14	-	1	14	-	-	-	-	-	-	
Acetylsalicylic acid (Aspirin)	50-78-2	-	-	-	-	5	-	-	-	-	-	-	
Acrolein	107-02-8	0.1	0.25	-	0.1	0.25	0.3	0.8	-	-	-	-	
Acrylamide	79-06-1	-	0.3	X	-	0.03	-	-	-	-	-	X	
Acrylic acid	79-10-7	-	-	-	10	30	-	-	-	-	-	X	
Acrylonitrile; see 1910.1045	107-13-1												
Aldrin	309-00-2	-	0.25	X	-	0.25	-	-	-	-	-	X	
Allyl alcohol	107-18-6	2	5	X	2	5	4	10	-	-	-	X	
Allyl chloride	107-05-1	1	3	-	1	3	2	6	-	-	-	-	
Allyl glycidyl ether (AGE)	106-92-3	(C)10	(C)45	-	5	22	10	44	-	-	-	-	
Allyl propyl disulfide	2179-59-1	2	12	-	2	12	3	18	-	-	-	-	
alpha-Alumina	1344-28-1												
Total dust		-	15	-	-	10	-	-	-	-	-	-	
Respirable fraction		-	5	-	-	5	-	-	-	-	-	-	

TABLE Z-1-A. Limits For Air Contaminants

Substance	CAS No.	Transitional Limits			Final Rule Limits**						
		PEL ^a		Skin Designation	TWA		STEL ^c		Ceiling		Skin Designation
		ppm ^a	mg/m ³ ^b		ppm ^a	mg/m ³ ^b	ppm ^a	mg/m ³ ^b	ppm ^a	mg/m ³ ^b	
Aluminum (as Al)	7429-90-5										
Metal											
Total dust		-	15	-	-	15	-	-	-	-	-
Respirable fraction		-	5	-	-	5	-	-	-	-	-
Pyro powders		-	-	-	-	5	-	-	-	-	-
Melting fumes***		-	-	-	-	5	-	-	-	-	-
Soluble salts		-	-	-	-	2	-	-	-	-	-
Alkyls		-	-	-	-	2	-	-	-	-	-
4-Aminodiphenyl; see 1910.1011	92-67-1										
2-Aminoethanol; see Ethanolamine											
2-Aminopyridine	504-29-0	0.5	2	-	0.5	2	-	-	-	-	-
Anitrole	61-82-5	-	-	-	-	0.2	-	-	-	-	-
Ammonia	7664-41-7	50	35	-	-	-	35	27	-	-	-
Ammonium chloride fume	12125-02-9	-	-	-	-	10	-	20	-	-	-
Ammonium sulfate	7773-06-0										
Total dust		-	15	-	-	10	-	-	-	-	-
Respirable fraction		-	5	-	-	5	-	-	-	-	-
n-Amyl acetate	628-63-7	100	525	-	100	525	-	-	-	-	-
sec-Amyl acetate	626-38-0	125	650	-	125	650	-	-	-	-	-
Aniline and homologs	62-53-3	5	19	X	2	8	-	-	-	-	X
Anisidine (o-,p-isomers)	29191-52-4	-	0.5	-	-	0.5	-	-	-	-	-
Antimony and compounds (as Sb)	7440-36-0	-	0.5	-	-	0.5	-	-	-	-	-
ANTU (Alpha naphthyl- thiourea)	86-88-4	-	0.3	-	-	0.3	-	-	-	-	-
Arsenic, organic compounds (as As)	7440-38-2	-	0.5	-	-	0.5	-	-	-	-	-
Arsenic, inorganic compounds (as As); see 1910.1018	Varies with compound										

See 1910.1018(a) for applications excluded

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Substance	CAS No.	Transitional Limits			Skin Designation	Final Rule Limits**						Skin Designation	
		PEL ^a		b		TWA		STEL ^c		CEILING			b
		ppm ^a	mg/m ³			ppm ^a	mg/m ³	ppm ^a	mg/m ³	ppm ^a	mg/m ³		
Arsine	7784-42-1	0.05	0.2	-	-	0.05	0.2	-	-	-	-	-	
Asbestos; see 1910.1001	Varies												
Atrazine	1912-24-9	-	-	-	-	-	5	-	-	-	-	-	
Azinphos-methyl	86-50-0	-	0.2	X	-	-	0.2	-	-	-	-	X	
Barium, soluble compounds (as Ba)	7440-39-3	-	0.5	-	-	-	0.5	-	-	-	-	-	
Barium sulfate	7727-43-7												
Total dust		-	15	-	-	-	10	-	-	-	-	-	
Respirable fraction		-	5	-	-	-	5	-	-	-	-	-	
Benzoyl	17804-35-2												
Total dust		-	15	-	-	-	10	-	-	-	-	-	
Respirable fraction		-	5	-	-	-	5	-	-	-	-	-	
Benzene; see 1910.1028	71-43-2	See Table Z-2 for the limits applicable in the operations or sectors excluded in 1910.1028 ^d											
Benzidine; see 1910.1010	92-87-5												
p-Benzoquinone; see Quinone													
Benzo(a)pyrene; see Coal tar pitch volatiles													
Benzoyl peroxide	94-36-0	-	5	-	-	-	5	-	-	-	-	-	
Benzyl chloride	100-44-7	1	5	-	-	1	5	-	-	-	-	-	
Beryllium and beryllium compounds (as Be)	7440-41-7	See Table Z-2				0.002	-	0.005 (30 min)	-	0.025	-	-	
Biphenyl; see Diphenyl													
Bismuth telluride, Undoped	1304-82-1												
Total dust		-	15	-	-	-	15	-	-	-	-	-	
Respirable fraction		-	5	-	-	-	5	-	-	-	-	-	
Bismuth telluride, Se-doped		-	-	-	-	-	5	-	-	-	-	-	

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Substance	CAS No.	Transitional Limits		Skin Designation	Final Rule Limits ^{ee}						Skin Designation
		PEL ^a			TWA		STEL ^c		CEILING		
		ppm ^d	mg/m ³ ^b		ppm ^d	mg/m ³ ^b	ppm ^d	mg/m ³ ^b	ppm ^d	mg/m ³ ^b	
Borates, tetra, sodium salts											
Anhydrous	1330-43-4	-	-	-	-	10	-	-	-	-	-
Decahydrate	1303-96-4	-	-	-	-	10	-	-	-	-	-
Pentahydrate	12179-04-3	-	-	-	-	10	-	-	-	-	-
Boron oxide	1303-86-2										
Total dust		-	15	-	-	10	-	-	-	-	-
Respirable fraction		-	5	-	-	5	-	-	-	-	-
Boron tribromide	10294-33-4	-	-	-	-	-	-	-	1	10	-
Boron trifluoride	7637-07-2	(C)1	(C)3	-	-	-	-	-	1	3	-
Bromacil	314-40-9	-	-	-	1	10	-	-	-	-	-
Bromine	7726-95-6	0.1	0.7	-	0.1	0.7	0.3	2	-	-	-
Bromine pentafluoride	7789-30-2	-	-	-	0.1	0.7	-	-	-	-	-
Bromoform	75-25-2	0.5	5	X	0.5	5	-	-	-	-	X
Butadiene (1,3-Butadiene)	106-99-0	1000	2200	-	In process of 6(b) rulemaking						
Butane	106-97-8	-	-	-	800	1900	-	-	-	-	-
Butanethiol; see Butyl mercaptan											
2-Butanone (Methyl ethyl ketone)	78-93-3	200	590	-	200	590	300	885	-	-	-
2-Butoxyethanol	111-76-2	50	240	X	25	120	-	-	-	-	X
n-Butyl acetate	123-86-4	150	710	-	150	710	200	950	-	-	-
sec-Butyl acetate	105-46-4	200	950	-	200	950	-	-	-	-	-
tert-Butyl acetate	540-88-5	200	950	-	200	950	-	-	-	-	-
Butyl acrylate	141-32-2	-	-	-	10	55	-	-	-	-	-
n-Butyl alcohol	71-36-3	100	300	-	-	-	-	-	50	150	X
sec-Butyl alcohol	78-92-2	150	450	-	100	305	-	-	-	-	-
tert-Butyl alcohol	75-65-0	100	300	-	100	300	150	450	-	-	-

TABLE 2-1-A. Limits For Air Contaminants

Substance	CAS No.	Transitional Limits		Skin Designation	Final Rule Limits TM						Skin Designation
		PEL ^a			TWA		STEL ^c		CEILING		
		ppm ^b	mg/m ³		ppm ^b	mg/m ³	ppm ^b	mg/m ³	ppm ^b	mg/m ³	
Butylamine	109-73-9	(C)5	(C)15	X	-	-	-	-	5	15	X
tert-Butyl chromate (as CrO ₃)	1189-85-1	-	(C)0.1	X	-	-	-	-	-	0.1	X
n-Butyl glycidyl ether (BGE)	2426-08-6	50	270	-	25	135	-	-	-	-	-
n-Butyl lactate	138-22-7	-	-	-	5	25	-	-	-	-	-
Butyl mercaptan	109-79-5	10	35	-	0.5	1.5	-	-	-	-	-
o-sec-Butylphenol	89-72-5	-	-	-	5	30	-	-	-	-	X
p-tert-Butyltoluene	98-51-1	10	60	-	10	60	20	120	-	-	-
Cadmium fume (as Cd)	7440-43-9	See Table 2-2		-	In process of 6(b) rulemaking						-
Cadmium dust (as Cd)	7440-43-9	See Table 2-2		-	In process of 6(b) rulemaking						-
Calcium carbonate	1317-65-3	-	-	-	-	-	-	-	-	-	-
Total dust		-	15	-	-	15	-	-	-	-	-
Respirable fraction		-	5	-	-	5	-	-	-	-	-
Calcium cyanamide	156-62-7	-	-	-	-	0.5	-	-	-	-	-
Calcium hydroxide	1305-62-0	-	-	-	-	5	-	-	-	-	-
Calcium oxide	1305-78-8	-	5	-	-	5	-	-	-	-	-
Calcium silicate	1344-95-2	-	-	-	-	-	-	-	-	-	-
Total dust		-	15	-	-	15	-	-	-	-	-
Respirable fraction		-	5	-	-	5	-	-	-	-	-
Calcium sulfate	7778-18-9	-	-	-	-	-	-	-	-	-	-
Total dust		-	15	-	-	15	-	-	-	-	-
Respirable fraction		-	5	-	-	5	-	-	-	-	-
Camphor, synthetic	76-22-2	-	2	-	-	2	-	-	-	-	-
Caprolactam	105-60-2	-	-	-	-	-	-	-	-	-	-
Dust		-	-	-	-	1	-	3	-	-	-
Vapor		-	-	-	5	20	10	40	-	-	-
Captan [®] (Difolatan [®])	2425-06-1	-	-	-	-	0.1	-	-	-	-	-
Captan	133-06-2	-	-	-	-	5	-	-	-	-	-

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Substance	CAS No.	Transitional Limits			Skin Designation	Final Rule Limits**						Skin Designation	
		PEL ^a		b		TWA		STEL ^c		CEILING			b
		ppm ^a	mg/m ³			ppm ^a	mg/m ³	ppm ^a	mg/m ³	ppm ^a	mg/m ³		
Carbaryl (Sevin [®])	63-25-2	-	5	-	-	5	-	-	-	-	-	-	
Carbofuran (Furadan [®])	1563-66-2	-	-	-	-	0.1	-	-	-	-	-	-	
Carbon black	1333-86-4	-	3.5	-	-	3.5	-	-	-	-	-	-	
Carbon dioxide	124-38-9	5000	9000	-	10,000	18,000	30,000	54,000	-	-	-	-	
Carbon disulfide	75-15-0	See Table Z-2				4	12	12	36	-	-	X	
Carbon monoxide	630-08-0	50	55	-	35	40	-	-	200	229	-	-	
Carbon tetrabromide	558-13-4	-	-	-	0.1	1.4	0.3	4	-	-	-	-	
Carbon tetrachloride	56-23-5	See Table Z-2				2	12.6	-	-	-	-	-	
Carbonyl fluoride	353-50-4	-	-	-	2	5	5	15	-	-	-	-	
Catechol (Pyrocatechol)	120-80-9	-	-	-	5	20	-	-	-	-	-	X	
Cellulose	9004-34-6	-	-	-	-	-	-	-	-	-	-	-	
Total dust		-	15	-	-	15	-	-	-	-	-	-	
Respirable fraction		-	5	-	-	5	-	-	-	-	-	-	
Cesium hydroxide	21351-79-1	-	-	-	-	2	-	-	-	-	-	-	
Chlordane	57-74-9	-	0.5	X	-	0.5	-	-	-	-	-	X	
Chlorinated camphene	8001-35-2	-	0.5	X	-	0.5	-	1	-	-	-	X	
Chlorinated diphenyl oxide	55720-99-5	-	0.5	-	-	0.5	-	-	-	-	-	-	
Chlorine	7782-50-5	(C)1	(C)3	-	0.5	1.5	1	3	-	-	-	-	
Chlorine dioxide	10049-04-4	0.1	0.3	-	0.1	0.3	0.3	0.9	-	-	-	-	
Chlorine trifluoride	7790-91-2	(C)0.1	(C)0.4	-	-	-	-	-	0.1	0.4	-	-	
Chloroacetaldehyde	107-20-0	(C)1	(C)3	-	-	-	-	-	1	3	-	-	
o-Chloroacetophenone (Phenacyl chloride)	532-27-4	0.05	0.3	-	0.05	0.3	-	-	-	-	-	-	
Chloroacetyl chloride	79-04-9	-	-	-	0.05	0.2	-	-	-	-	-	-	
Chlorobenzene	108-90-7	75	350	-	75	350	-	-	-	-	-	-	

TABLE Z-1-A. Limits For Air Contaminants

Substance	CAS No.	Transitional Limits			Skin Designation	Final Rule Limits**						Skin Designation
		PEL ^a		TWA		STEL ^c		CEILING				
		ppm ^a	mg/m ³ ^b			ppm ^a	mg/m ³ ^b	ppm ^a	mg/m ³ ^b			
α -Chlorobenzylidene malonitrile	2698-41-1	0.05	0.4	-	-	-	-	-	0.05	0.4	X	
Chlorobromomethane	74-97-5	200	1050	-	200	1050	-	-	-	-	-	
2-Chloro-1,3-butadiene; see 1-Chloroprene												
Chlorodifluoromethane	75-45-6	-	-	-	1000	3500	-	-	-	-	-	
Chlorodiphenyl (42% Chlorine) (PCB)	53469-21-9	-	1	X	-	1	-	-	-	-	X	
Chlorodiphenyl (54% Chlorine) (PCB)	11097-69-1	-	0.5	X	-	0.5	-	-	-	-	X	
1-Chloro-2,3-epoxypropane; see Epichlorohydrin												
2-Chloroethanol; see Ethylene chlorohydrin												
Chloroethylene; see Vinyl chloride												
Chloroform (Trichloromethane)	67-66-3	(C)50	(C)240	-	2	9.78	-	-	-	-	-	
bis(Chloromethyl) ether; see 1910.1008	542-88-1											
Chloromethyl methyl ether; see 1910.1006	107-30-2											
1-Chloro-1-nitropropane	600-25-9	20	100	-	2	10	-	-	-	-	-	
Chloropentafluoroethane	76-15-3	-	-	-	1000	6320	-	-	-	-	-	
Chloropicrin	76-06-2	0.1	0.7	-	0.1	0.7	-	-	-	-	-	
beta-Chloroprene	126-99-8	25	90	X	10	35	-	-	-	-	X	
α -Chlorostyrene	2039-87-4	-	-	-	50	285	75	430	-	-	-	
α -Chlorotoluene	95-49-8	-	-	-	50	250	-	-	-	-	-	

TABLE Z-1-A. Limits For Air Contaminants

Substance	CAS No.	Transitional Limits			Skin Designation	Final Rule Limits**						Skin Designation
		PEL ^a		mg/m ³ ^b		TWA		STEL ^c		CEILING		
		ppm ^a				ppm ^a	mg/m ³ ^b	ppm ^a	mg/m ³ ^b	ppm ^a	mg/m ³ ^b	
2-Chloro-6-trichloro-methyl pyridine	1929-82-4											
Total dust		-	15	-	-	15	-	-	-	-	-	-
Respirable fraction		-	5	-	-	5	-	-	-	-	-	-
Chlorpyrifos	2921-88-2	-	-	-	-	0.2	-	-	-	-	-	R
Chromic acid and chromates (as CrO ₃)	Varies with compound		See Table Z-2		-	-	-	-	0.1	-	-	-
Chromium (II) compounds (as Cr)	Varies with compound	-	0.5	-	-	0.5	-	-	-	-	-	-
Chromium (III) compounds (as Cr)	Varies with compound	-	0.5	-	-	0.5	-	-	-	-	-	-
Chromium metal (as Cr)	7440-47-3	-	1	-	-	1	-	-	-	-	-	-
Chrysene; see Coal tar pitch volatiles	218-01-9											
Clopidol	2971-90-6											
Total dust		-	15	-	-	15	-	-	-	-	-	-
Respirable fraction		-	5	-	-	5	-	-	-	-	-	-
Coal dust (less than 5% SiO ₂), Respirable quartz fraction	-		See Table Z-3			2	-	-	-	-	-	-
Coal dust (greater than or equal to 5% SiO ₂), Respirable quartz fraction	-		See Table Z-3			0.1	-	-	-	-	-	-
Coal tar pitch volatiles (benzene soluble fraction), anthracene, BaP, phenanthrene, acridine, chrysene, pyrene	8007-45-2	-	0.2	-	-	0.2	-	-	-	-	-	-
Cobalt metal, dust, and fume (as Co)	7440-48-4	-	0.1	-	-	0.05	-	-	-	-	-	-

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Substance	CAS No.	Transitional Limits			Skin Designation	Final Rule Limits ^a						Skin Designation	
		PEL ^c		b		TWA		SIEL ^c		CEILING			b
		ppm ^a	mg/m ³			ppm ^a	mg/m ³	ppm ^a	mg/m ³	ppm ^a	mg/m ³		
Cobalt carbonyl (as Co)	10210-68-1	-	-	-	-	0.1	-	-	-	-	-	-	
Cobalt hydrocarbonyl (as Co)	16842-03-8	-	-	-	-	0.1	-	-	-	-	-	-	
Coke oven emissions; see 1910.1029	-	-	-	-	-	-	-	-	-	-	-	-	
Copper	7440-50-8	-	-	-	-	-	-	-	-	-	-	-	
Fume (as Cu)		-	0.1	-	-	0.1	-	-	-	-	-	-	
Dusts and mists (as Cu)		-	1	-	-	1	-	-	-	-	-	-	
Cotton dust (raw),	--	1	-	-	-	1	-	-	-	-	-	-	
This 8-hour TWA applies to respirable dust as measured by a vertical elutriator cotton dust sampler or equivalent instrument. The time-weighted average applies to the cotton waste processing operations of waste recycling (sorting, blending, cleaning, and willowing) and ginning. See also 1910.1043 for cotton dust limits applicable to other sectors.													
Crag herbicide (Sesone)	136-78-7	-	15	-	-	10	-	-	-	-	-	-	
Total dust		-	5	-	-	5	-	-	-	-	-	-	
Respirable fraction		-	5	-	-	5	-	-	-	-	-	-	
Cresol, all isomers	1319-77-3; 95-48-7; 108-39-4; 106-44-5	5	22	X	-	5	22	-	-	-	-	X	
Crotonaldehyde	123-73-9; 4170-30-3	2	6	-	-	2	6	-	-	-	-	-	
Cruformate	299-86-5	-	-	-	-	5	-	-	-	-	-	-	
Cumene	98-82-8	50	245	X	-	50	245	-	-	-	-	X	
Cyanamide	420-04-2	-	-	-	-	2	-	-	-	-	-	-	
Cyanides (as CN)	151-50-8	-	5	-	-	5	-	-	-	-	-	-	
Cyanogen	460-19-5	-	-	-	-	10	20	-	-	-	-	-	
Cyanogen chloride	506-77-4	-	-	-	-	-	-	-	0.3	0.6	-	-	
Cyclohexane	110-82-7	300	1050	-	-	300	1050	-	-	-	-	-	
Cyclohexanol	108-93-0	50	200	-	-	50	200	-	-	-	-	X	

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Substance	CAS No.	Transitional Limits			Final Rule Limits ^a						
		PEL ^a		Skin Designation	TWA		STEL ^c		CEILING		Skin Designation
		ppm ^b	mg/m ³		ppm ^b	mg/m ³	ppm ^b	mg/m ³	ppm ^b	mg/m ³	
Cyclohexanone	108-94-1	50	200	-	25	100	-	-	-	-	-
Cyclohexene	110-83-8	300	1015	-	300	1015	-	-	-	-	-
Cyclohexylamine	106-91-8	-	-	-	10	40	-	-	-	-	-
Cyclonite	121-82-4	-	-	-	-	1.5	-	-	-	-	X
Cyclopentadiene	542-92-7	75	200	-	75	200	-	-	-	-	-
Cyclopentane	287-92-3	-	-	-	600	1720	-	-	-	-	-
Cyhexatin	13121-70-5	-	-	-	-	5	-	-	-	-	-
2,4-D (Dichlorophenoxy-acetic acid)	94-75-7	-	18	-	-	10	-	-	-	-	-
Decaborane	17702-41-9	0.05	0.3	X	0.05	0.3	0.15	0.9	-	-	X
Demeton (Systox [®])	8065-48-3	-	0.1	X	-	0.1	-	-	-	-	X
Dichlorodiphenyltri-chloroethane (DDT)	50-29-3	-	1	X	-	1	-	-	-	-	X
Dichlorvos (DDVP)	62-73-7	-	1	X	-	1	-	-	-	-	X
Diacetone alcohol (4-Hydroxy-4-methyl-2-pentanone)	123-42-2	50	240	-	50	240	-	-	-	-	-
1,2-Diaminoethane; see Ethylenediamine											
Diazinon	333-41-5	-	-	-	-	0.1	-	-	-	-	X
Diazomethane	334-89-3	0.2	0.4	-	0.2	0.4	-	-	-	-	-
Diborane	19287-45-7	0.1	0.1	-	0.1	0.1	-	-	-	-	-
1,2-Dibromo-3-chloropropane; see 1910:1044	96-12-8	-	-	-	-	-	-	-	-	-	-
2-N-Dibutylamino-ethanol	102-81-8	-	-	-	2	14	-	-	-	-	-
Dibutyl phosphate	107-66-4	1	5	-	1	5	2	10	-	-	-

TABLE 2-1-A. Limits For Air Contaminants

Substance	CAS No.	Transitional Limits			Final Rule Limits ^{aa}						
		PEL ^a		Skin Designation	TWA		STEL ^c		CEILING		Skin Designation
		ppm ^b	mg/m ³		ppm ^b	mg/m ³	ppm ^b	mg/m ³	ppm ^b	mg/m ³	
Dibutyl phthalate	84-74-2	-	5	-	-	5	-	-	-	-	-
Dichloroacetylene	7572-29-4	-	-	-	-	-	-	-	0.1	0.4	-
o-Dichlorobenzene	95-50-1	(C)50	(C)300	-	-	-	-	-	50	300	-
p-Dichlorobenzene	106-46-7	75	450	-	75	450	110	675	-	-	-
3,3'-Dichlorobenzidine; see 1910.1007	91-94-1	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane	75-71-8	1000	4950	-	1000	4950	-	-	-	-	-
1,3-Dichloro-5,5-dimethyl hydantoin	118-52-5	-	0.2	-	-	0.2	-	0.4	-	-	-
1,1-Dichloroethane	75-34-3	100	400	-	100	400	-	-	-	-	-
1,2-Dichloroethylene	540-59-0	200	790	-	200	790	-	-	-	-	-
Dichloroethyl ether	111-44-4	(C)15	(C)90	X	5	30	10	60	-	-	X
Dichloromethane; see Methylene chloride											
Dichloromonofluoromethane	75-43-4	1000	4200	-	10	40	-	-	-	-	-
1,1-Dichloro-1-nitroethane	594-72-9	(C)10	(C)60	-	2	10	-	-	-	-	-
1,2-Dichloropropane; see Propylene dichloride											
1,3-Dichloropropene	542-75-6	-	-	-	1	5	-	-	-	-	X
2,2-Dichloropropionic acid	75-99-0	-	-	-	1	6	-	-	-	-	-
Dichlorotetrafluoroethane	76-14-2	1000	7000	-	1000	7000	-	-	-	-	-
Dicrotophos	141-66-2	-	-	-	-	0.25	-	-	-	-	X
Dicyclopentadiene	77-73-6	-	-	-	5	30	-	-	-	-	-

TABLE 2-1-A. Limits For Air Contaminants

Substance	CAS No.	Transitional Limits			Final Rule Limits ^a						
		PEL ^a		Skin Designation	TWA		STEL ^c		CEILING		Skin Designation
		ppm ^b	mg/m ³		ppm ^b	mg/m ³	ppm ^b	mg/m ³	ppm ^b	mg/m ³	
Dicyclopentadienyl iron	102-54-5	-	15	-	-	10	-	-	-	-	-
Total dust		-	5	-	-	5	-	-	-	-	-
Respirable fraction		-	-	-	-	-	-	-	-	-	-
Dieldrin	60-57-1	-	0.25	X	-	0.25	-	-	-	-	X
Diethanolamine	111-42-2	-	-	-	3	15	-	-	-	-	-
Diethylamine	109-89-7	25	75	-	10	30	25	75	-	-	-
2-Diethylaminoethanol	100-37-8	10	50	X	10	50	-	-	-	-	X
Diethylene triamine	111-40-0	-	-	-	1	4	-	-	-	-	-
Diethyl ether; see Ethyl ether											
Diethyl ketone	96-22-0	-	-	-	200	705	-	-	-	-	-
Diethyl phthalate	84-66-2	-	-	-	-	5	-	-	-	-	-
Difluorodibromomethane	75-61-6	100	860	-	100	860	-	-	-	-	-
Diglycidyl ether (DGE)	2238-07-5	(C)0.5	(C)2.0	-	0.1	0.5	-	-	-	-	-
Dihydroxybenzene; see Hydroquinone											
Diisobutyl ketone	108-83-8	50	290	-	25	150	-	-	-	-	-
Diisopropylamine	108-18-9	5	20	X	5	20	-	-	-	-	X
4-Dimethylaminoazobenzene; see 1910, 1015	60-11-7										
Dimethoxymethane; see Methylal											
Dimethyl acetamide	127-19-5	10	35	X	10	35	-	-	-	-	X
Dimethylamine	124-40-3	10	18	-	10	18	-	-	-	-	-
Dimethylaminobenzene; see Xylidine											

TABLE Z-1-A. Limits For Air Contaminants

Substance	CAS No.	Transitional Limits			Skin Designation	Final Rule Limits ^{aa}						Skin Designation	
		PEL ^a		b		TWA		STEL ^c		CEILING			b
		ppm ^a	mg/m ³			ppm ^a	mg/m ³	ppm ^a	mg/m ³	ppm ^a	mg/m ³		
Dimethylaniline (N-Dimethyl-aniline)	121-69-7	5	25	X	5	25	10	50	-	-	X		
Dimethylbenzene; see Xylene													
Dimethyl-1,2-dibromo- 2,2-dichloroethyl phosphate	300-76-5	-	3	-	-	3	-	-	-	-	X		
Dimethylformamide	68-12-2	10	30	X	10	30	-	-	-	-	X		
2,6-Dimethyl-4-hepta- none; see Diisobutyl ketone													
1,1-Dimethylhydrazine	57-14-7	0.5	1	X	0.5	1	-	-	-	-	X		
Dimethylphthalate	131-11-3	-	5	-	-	5	-	-	-	-	-		
Dimethyl sulfate	17-78-1	1	5	X	0.1	0.5	-	-	-	-	X		
Dinitolmide (3,5- Dinitro-o-toluenide)	148-01-6	-	-	-	-	5	-	-	-	-	-		
Dinitrobenzene (all isomers)	528-29-0 99-65-0 100-25-4	-	1	X	-	1	-	-	-	-	X		
Dinitro-o-cresol	534-52-1	-	0.2	X	-	0.2	-	-	-	-	X		
Dinitrotoluene	121-14-2	-	1.5	X	-	1.5	-	-	-	-	X		
Dioxane (Diethylene dioxide)	123-91-1	100	360	X	25	90	-	-	-	-	X		
Dioxathion (DeNav)	78-34-2	-	-	-	-	0.2	-	-	-	-	X		
Diphenyl (Biphenyl)	92-52-4	0.2	1	-	0.2	1	-	-	-	-	-		
Diphenylamine	122-39-4	-	-	-	-	10	-	-	-	-	-		
Diphenylmethane diiso- cyanate; see Methylene bisphenyl isocyanate													
Dipropylene glycol methyl ether	34590-94-8	100	600	X	100	600	150	900	-	-	-		

TABLE 2-1-A. Limits For Air Contaminants

Substance	CAS No.	Transitional Limits			Skin Designation	Final Rule Limits ²²						Skin Designation	
		PEL ^a		ppm ^a		TWA		STEL ^c		CEILING			
		ppm ^a	mg/m ³ ^b			ppm ^a	mg/m ³ ^b	ppm ^a	mg/m ³ ^b	ppm ^a	mg/m ³ ^b		
Dipropyl ketone	123-19-3	-	-	-	-	50	235	-	-	-	-	-	-
Diquat	85-00-7	-	-	-	-	-	0.5	-	-	-	-	-	-
Di-sec octyl phthalate (Di-2-ethylhexyl-phthalate)	117-81-7	-	5	-	-	-	5	-	10	-	-	-	-
Disulfiram	97-77-8	-	-	-	-	-	2	-	-	-	-	-	-
Disulfoton	298-04-4	-	-	-	-	-	0.1	-	-	-	-	-	X
2,6-Di-tert-butyl-p-cresol	128-37-0	-	-	-	-	-	10	-	-	-	-	-	-
Diuron	330-54-1	-	-	-	-	-	10	-	-	-	-	-	-
Divinyl benzene	108-57-6	-	-	-	-	10	50	-	-	-	-	-	-
Emery	112-62-9	-	-	-	-	-	-	-	-	-	-	-	-
Total dust		-	15	-	-	-	10	-	-	-	-	-	-
Respirable fraction		-	5	-	-	-	5	-	-	-	-	-	-
Endosulfan	115-29-7	-	-	-	-	-	0.1	-	-	-	-	-	X
Endrin	72-20-8	-	0.1	X	-	-	0.1	-	-	-	-	-	X
Epichlorohydrin	106-89-8	5	19	X	2	8	-	-	-	-	-	-	X
EPN	2104-64-5	-	0.5	X	-	-	0.5	-	-	-	-	-	X
1,2-Epoxypropane; see Propylene oxide													
2,3-Epoxy-1-propanol; see Glycidol													
Ethanethiol; see Ethyl mercaptan													
Ethanolamine	141-43-5	3	6	-	3	8	6	15	-	-	-	-	-
Ethion	563-12-2	-	-	-	-	0.4	-	-	-	-	-	-	X
2-Ethoxyethanol	110-80-5	200	740	X	In process of 6(b) rulemaking								
2-Ethoxyethyl acetate (Cellosolve acetate)	111-15-9	100	540	X	In process of 6(b) rulemaking								

TABLE 2-1-A. Limits For Air Contaminants

Substance	CAS No.	Transitional Limits		Skin Designation	Final Rule Limits ^{aa}						Skin Designation	
		PEL ^a			TWA		STEL ^c		CEILING			
		ppm ^b	mg/m ³		ppm ^b	mg/m ³	ppm ^b	mg/m ³	ppm ^b	mg/m ³		
Ethyl acetate	141-78-6	400	1400	-	400	1400	-	-	-	-	-	
Ethyl acrylate	140-88-5	25	100	X	5	20	25	100	-	-	X	
Ethyl alcohol (Ethanol)	64-17-5	1000	1900	-	1000	1900	-	-	-	-	-	
Ethylamine	75-04-7	10	18	-	10	18	-	-	-	-	-	
Ethyl amyl ketone (5-Methyl-3-heptanone)	106-68-3	25	130	-	25	130	-	-	-	-	-	
Ethyl benzene	100-41-4	100	435	-	100	435	125	545	-	-	-	
Ethyl bromide	74-96-4	200	890	-	200	890	250	1110	-	-	-	
Ethyl butyl ketone (3-Heptanone)	106-35-4	50	230	-	50	230	-	-	-	-	-	
Ethyl chloride	75-00-3	1000	2600	-	1000	2600	-	-	-	-	-	
Ethyl ether	60-29-7	400	1200	-	400	1200	500	1500	-	-	-	
Ethyl formate	109-94-4	100	300	-	100	300	-	-	-	-	-	
Ethyl mercaptan	75-08-1	(C)10	(C)25	-	0.5	1	-	-	-	-	-	
Ethyl silicate	78-10-4	100	850	-	10	85	-	-	-	-	-	
Ethylene chlorohydrin	107-07-3	5	16	X	-	-	-	-	1	3	X	
Ethylenediamine	107-15-3	10	25	-	10	25	-	-	-	-	-	
Ethylene dibromide	106-93-4	See Table Z-2				in process of 6(b) rulemaking						
Ethylene dichloride	107-06-2	See Table Z-2				1	4	2	8	-	-	-
Ethylene glycol	107-21-1	-	-	-	-	-	-	-	50	125	-	
Ethylene glycol dinitrate	628-96-6	(C)0.2	(C)1	X	-	-	-	0.1	-	-	X	
Ethylene glycol methyl acetate; see Methyl cellosolve acetate												
Ethylenimine; see 1910.1012	151-56-4											

TABLE 2-1-A. Limits for Air Contaminants

Substance	CAS No.	Transitional Limits			Skin Designation	Final Rule Limits**						Skin Designation	
		PEL ^a		b		TWA		STEL ^c		CEILING			b
		ppm ^d	mg/m ³			ppm ^d	mg/m ³	ppm ^d	mg/m ³	ppm ^d	mg/m ³		
Ethylene oxide; see 1910.1047	75-21-8					See 1910.1047(a)(2) for operations excluded							
Ethylidene chloride; see 1,1-Dichloroethane													
Ethylidene norbornene	16219-75-3	-	-	-		-	-	-	-	5	25	-	
N-Ethylmorpholine	100-74-3	20	94	X		5	23	-	-	-	-	X	
Fenamiphos	22224-92-6	-	-	-		-	0.1	-	-	-	-	X	
Fensulfothion (Dasanit)	115-90-2	-	-	-		-	0.1	-	-	-	-	-	
Fenthion	55-38-9	-	-	-		-	0.2	-	-	-	-	X	
Forbam Total dust	14484-64-1	-	15	-		-	10	-	-	-	-	-	
Respirable fraction		-	5	-		-	5	-	-	-	-	-	
Ferrovandium dust	12604-58-9	-	1	-		-	1	-	3	-	-	-	
Fluorides (as F)	Varies with compound	See Table 2-2				2.5	-	-	-	-	-	-	
Fluorine	7782-41-4	0.1	0.2	-		0.1	0.2	-	-	-	-	-	
Fluorotrichloro- methane (Trichloro- fluoromethane)	75-69-4	1000	5600	-		-	-	-	-	1000	5600	-	
Fonofos	944-22-5	-	-	-		-	0.1	-	-	-	-	X	
Formaldehyde; see 1910.1048;	50-00-0	See Table 2-2 for operations or sectors excluded or for which limit(s) is(are) stayed.											
Formamide	75-12-1	-	-	-		20	30	30	45	-	-	-	
Formic acid	64-18-6	5	9	-		5	9	-	-	-	-	-	
Furfural	98-01-1	5	20	X		2	8	-	-	-	-	X	
Furfuryl alcohol	98-00-0	50	200	-		10	40	15	60	-	-	X	
Gasoline	8006-61-9	-	-	-		300	900	500	1500	-	-	-	
Germanium tetra- hydride	7782-65-2	-	-	-		0.2	0.6	-	-	-	-	-	

TABLE Z-1-A. Limits For Air Contaminants

Substance	CAS No.	Transitional Limits			Skin Designation	Final Rule Limits ^{aa}						Skin Designation	
		PEL ^a		ppm ^a		mg/m ³	TWA		STEL ^c		CEILING		
		ppm ^a	mg/m ³				ppm ^a	mg/m ³	ppm ^a	mg/m ³	ppm ^a		mg/m ³
Glutaraldehyde	111-30-8	-	-	-	-	-	-	-	-	0.2	0.8		
Glycerin (mist)	56-81-5	-	15	-	-	10	-	-	-	-	-		
Total dust		-	5	-	-	5	-	-	-	-	-		
Respirable fraction		-	5	-	-	5	-	-	-	-	-		
Glycidol	556-52-5	50	150	-	25	75	-	-	-	-	-		
Glycol monoethyl ether; see 2-Ethoxyethanol													
Grain dust (oat, wheat, barley)	-	-	-	-	-	10	-	-	-	-	-		
Graphite, natural respirable dust	7782-42-5	See Table Z-3			-	2.5	-	-	-	-	-		
Graphite, synthetic	-	-	15	-	-	10	-	-	-	-	-		
Total dust		-	5	-	-	5	-	-	-	-	-		
Respirable fraction		-	5	-	-	5	-	-	-	-	-		
Guthion [®] ; see Azinphos methyl													
Gypsum	7778-18-9	-	15	-	-	15	-	-	-	-	-		
Total dust		-	5	-	-	5	-	-	-	-	-		
Respirable fraction		-	5	-	-	5	-	-	-	-	-		
Hafnium	7440-58-6	-	0.5	-	-	0.5	-	-	-	-	-		
Heptachlor	76-44-8	-	0.5	X	-	0.5	-	-	-	-	-	X	
Heptane (n-Heptane)	142-82-5	500	2000	-	400	1600	500	2000	-	-	-		
Hexachlorobutadiene	87-68-3	-	-	-	0.02	0.24	-	-	-	-	-		
Hexachlorocyclo- pentadiene	77-47-4	-	-	-	0.01	0.1	-	-	-	-	-		
Hexachloroethane	67-72-1	1	10	X	1	10	-	-	-	-	-	X	
Hexachloronaphthalene	1335-87-1	-	0.2	X	-	0.2	-	-	-	-	-	X	
Hexafluoroacetone	684-16-2	-	-	-	0.1	0.7	-	-	-	-	-	X	
n-Hexane	110-54-3	500	1800	-	50	180	-	-	-	-	-		
Hexane isomers	Varies with compound	-	-	-	500	1800	1000	3600	-	-	-		

TABLE Z-1-A. Limits For Air Contaminants

Substance	CAS No.	Transitional Limits			Skin Designation	Final Rule Limits ^{aa}						Skin Designation
		PEL ^a		ppm ^b		TWA		STEL ^c		CEILING		
		ppm ^b	mg/m ³			ppm ^b	mg/m ³	ppm ^b	mg/m ³	ppm ^b	mg/m ³	
2-Hexanone (Methyl n-butyl ketone)	591-78-6	100	410	-	5	20	-	-	-	-	-	-
Hexone (Methyl isobutyl ketone)	108-10-1	100	410	-	50	205	75	300	-	-	-	-
sec-Hexyl acetate	108-84-9	50	300	-	50	300	-	-	-	-	-	-
Hexylene glycol	107-41-5	-	-	-	-	-	-	-	25	125	-	-
Hydrazine	302-01-2	1	1.3	X	0.1	0.1	-	-	-	-	-	X
Hydrogenated terphenyls	61788-32-7	-	-	-	0.5	5	-	-	-	-	-	-
Hydrogen bromide	10035-10-6	3	10	-	-	-	-	-	3	10	-	-
Hydrogen chloride	7647-01-0	(C)5	(C)7	-	-	-	-	-	5	7	-	-
Hydrogen cyanide	74-90-8	10	11	X	-	-	4.7	5	-	-	-	X
Hydrogen fluoride (as F)	7664-39-3	See Table Z-2	-	-	3	-	6	-	-	-	-	-
Hydrogen peroxide	7722-84-1	1	1.4	-	1	1.4	-	-	-	-	-	-
Hydrogen selenide (as Se)	7783-07-5	0.05	0.2	-	0.05	0.2	-	-	-	-	-	-
Hydrogen sulfide	7783-06-4	See Table Z-2	-	-	10	14	15	21	-	-	-	-
Hydroquinone	123-31-9	-	2	-	-	2	-	-	-	-	-	-
2-Hydroxypropyl acrylate	999-61-1	-	-	-	0.5	3	-	-	-	-	-	X
Indene	95-13-6	-	-	-	10	45	-	-	-	-	-	-
Indium and compounds (as In)	7440-74-6	-	-	-	-	0.1	-	-	-	-	-	-
Iodine	7553-56-2	(C)0.1	(C)1	-	-	-	-	-	0.1	1	-	-
Iodoform	75-47-8	-	-	-	0.6	10	-	-	-	-	-	-
Iron oxide dust and fume (as Fe)	1309-37-1	-	10	-	-	10	-	-	-	-	-	-
Total particulate		-	10	-	-	10	-	-	-	-	-	-

TABLE Z-1-A. Limits For Air Contaminants

Substance	CAS No.	Transitional Limits			Skin Designation	Final Rule Limits ^{aa}						Skin Designation
		PEL ^a		TWA		STEL ^c		CEILING				
		ppm ^b	mg/m ³			ppm ^b	mg/m ³	ppm ^b	mg/m ³			
Iron pentacarbonyl (as Fe)	13463-40-6	-	-	-	0.1	0.8	0.2	1.6	-	-	-	
Iron salts (soluble) (as Fe)	Varies with compound	-	-	-	-	1	-	-	-	-	-	
Isoamyl acetate	123-92-2	100	525	-	100	525	-	-	-	-	-	
Isoamyl alcohol (primary and secondary)	123-51-3	100	360	-	100	360	125	450	-	-	-	
Isobutyl acetate	110-19-0	150	700	-	150	700	-	-	-	-	-	
Isobutyl alcohol	78-83-1	100	300	-	50	150	-	-	-	-	-	
Isooctyl alcohol	26952-21-6	-	-	-	50	270	-	-	-	-	X	
Isophorone	78-59-1	25	140	-	4	23	-	-	-	-	-	
Isophorone diisocyanate	4098-71-9	-	-	-	0.005	-	0.02	-	-	-	X	
2-Isopropoxyethanol	109-59-1	-	-	-	25	105	-	-	-	-	-	
Isopropyl acetate	108-21-4	250	950	-	250	950	310	1185	-	-	-	
Isopropyl alcohol	67-63-0	400	980	-	400	980	500	1225	-	-	-	
Isopropylamine	75-31-0	5	12	-	5	12	10	24	-	-	-	
N-Isopropylaniline	768-52-5	-	-	-	2	10	-	-	-	-	X	
Isopropyl ether	108-20-3	500	2100	-	500	2100	-	-	-	-	-	
Isopropyl glycidyl ether (IGE)	4016-14-2	50	240	-	50	240	75	360	-	-	-	
Kaolin												
Total dust		-	15	-	-	10	-	-	-	-	-	
Respirable fraction		-	5	-	-	5	-	-	-	-	-	
Ketene	463-51-4	0.5	0.9	-	0.5	0.9	1.5	3	-	-	-	
Lead inorganic (as Pb); see 1910.1025	7439-92-1	For independent battery breaking, non-ferrous foundries, secondary copper, lead pigments, lead chemical, ship building, stevedoring, and brass and bronze ingot manufacturing, paragraph (e)(1) is under court remand										

TABLE Z-1-A. Limits For Air Contaminants

Substance	CAS No.	Transitional Limits			Final Rule Limits**						
		PEL ^a		Skin Designation	TMA		STEL ^c		CEILING		Skin Designation
		ppm ^d	mg/m ³		ppm ^d	mg/m ³	ppm ^d	mg/m ³	ppm ^d	mg/m ³	
Limestone	1317-67-3	-	-	-	-	-	-	-	-	-	-
Total dust		-	15	-	-	15	-	-	-	-	-
Respirable fraction		-	5	-	-	5	-	-	-	-	-
Lindane	58-89-9	-	0.5	X	-	0.5	-	-	-	-	X
Lithium hydride	7580-67-8	-	0.025	-	-	0.025	-	-	-	-	-
L.P.G. (Liquefied petroleum gas)	68476-85-7	1000	1800	-	1000	1800	-	-	-	-	-
Magnesite	546-93-0	-	-	-	-	-	-	-	-	-	-
Total dust		-	15	-	-	15	-	-	-	-	-
Respirable fraction		-	5	-	-	5	-	-	-	-	-
Magnesium oxide fume	1309-48-4	-	-	-	-	-	-	-	-	-	-
Total dust		-	15	-	-	10	-	-	-	-	-
Respirable fraction		-	5	-	-	5	-	-	-	-	-
Malathion	121-75-5	-	-	-	-	-	-	-	-	-	-
Total dust		-	15	X	-	10	-	-	-	-	X
Respirable fraction		-	5	X	-	5	-	-	-	-	X
Maleic anhydride	108-31-6	0.25	1	-	0.25	1	-	-	-	-	-
Manganese compounds (as Mn)	7439-96-5	-	(C)5	-	-	-	-	-	-	5	-
Manganese fume (as Mn)	7439-96-5	-	(C)5	-	-	1	-	3	-	-	-
Manganese cyclopentadienyl tricarbonyl (as Mn)	12079-65-1	-	-	-	-	0.1	-	-	-	-	X
Manganese tetroxide (as Mn)	1317-35-7	-	-	-	-	1	-	-	-	-	-
Marble	1317-65-3	-	-	-	-	-	-	-	-	-	-
Total dust		-	15	-	-	15	-	-	-	-	-
Respirable fraction		-	5	-	-	5	-	-	-	-	-
Mercury (aryl and inorganic)(as Hg)	7439-97-6	See Table Z-2	-	-	-	-	-	-	-	0.1	X
Mercury (organo) alkyl compounds (as Hg)	7439-97-6	See Table Z-2	-	-	-	0.01	-	0.03	-	-	X
Mercury (vapor) (as Hg)	7439-97-6	See Table Z-2	-	-	-	0.05	-	-	-	-	X

TABLE 2-1-A. Limits For Air Contaminants

Substance	CAS No.	Transitional Limits			Final Rule Limits ^{aa}						
		PEL ^a		Skin Designation	TWA		STEL ^c		CEILING		Skin Designation
		ppm ^b	mg/m ³		ppm ^b	mg/m ³	ppm ^b	mg/m ³	ppm ^b	mg/m ³	
Mesityl oxide	141-79-7	25	100	-	15	60	25	100	-	-	-
Methacrylic acid	79-81-4	-	-	-	20	70	-	-	-	-	X
Methanethiol; see Methyl mercaptan											
Methomyl (Lannate)	16752-77-5	-	-	-	-	2.5	-	-	-	-	-
Methoxychlor	72-43-5	-	-	-	-	-	-	-	-	-	-
Total dust		-	15	-	-	10	-	-	-	-	-
Respirable fraction		-	5	-	-	5	-	-	-	-	-
2-Methoxyethanol; see Methyl cellosolve											
4-Methoxyphenol	150-76-5	-	-	-	-	5	-	-	-	-	-
Methyl acetate	79-20-9	200	610	-	200	610	250	760	-	-	-
Methyl acetylene (Propyne)	74-99-7	1000	1650	-	1000	1650	-	-	-	-	-
Methyl acetylene-propadiene mixture (HAPP)	-	1000	1800	-	1000	1800	1250	2250	-	-	-
Methyl acrylate	96-33-3	10	35	X	10	35	-	-	-	-	X
Methylacrylonitrile	126-98-7	-	-	-	1	3	-	-	-	-	X
Methylal (Dimethoxy-methane)	109-87-5	1000	3100	-	1000	3100	-	-	-	-	-
Methyl alcohol	67-56-1	200	260	-	200	260	250	310	-	-	X
Methylamine	74-89-5	10	12	-	10	12	-	-	-	-	-
Methyl amyl alcohol; see Methyl isobutyl carbinol											
Methyl n-amyl ketone	110-43-0	100	465	-	100	465	-	-	-	-	-
Methyl bromide	74-83-9	(C)20	(C)80	X	5	20	-	-	-	-	X

TABLE Z-1-A. Limits For Air Contaminants

Substance	CAS No.	Transitional Limits			Skin Designation	Final Rule Limits ^{aa}						Skin Designation
		PEL ^a		b		TWA		STEL ^c		CEILING		
		ppm ^b	mg/m ³			ppm ^b	mg/m ³	ppm ^b	mg/m ³	ppm ^b	mg/m ³	
Methyl butyl ketone; see 2-hexanone												
Methyl cellosolve (2-methoxyethanol)	109-66-4	25	80	X	In process of 6(b) rulemaking							
Methyl cellosolve acetate (2-methoxyethyl acetate)	110-49-6	25	120	X	In process of 6(b) rulemaking							
Methyl chloride	74-87-3	See Table Z-2				50	105	100	205	-	-	-
Methyl chloroform (1,1,1-trichloroethane)	71-55-6	350	1900	-	350	1900	450	2450	-	-	-	
Methyl 2-cyanoacrylate	137-05-3	-	-	-	2	8	4	16	-	-	-	
Methylcyclohexane	108-87-2	500	2000	-	400	1600	-	-	-	-	-	
Methylcyclohexanol	25639-42-3	100	470	-	50	235	-	-	-	-	-	
o-Methylcyclohexanone	583-60-8	100	460	X	50	230	75	345	-	-	X	
Methylcyclopentadienyl manganese tricarbonyl (as Mn)	12108-13-3	-	-	-	-	0.2	-	-	-	-	X	
Methyl demeton	8022-00-2	-	-	-	-	0.5	-	-	-	-	X	
4,4'-Methylene bis (2-chloroaniline) (MBCA)	101-14-4	-	-	-	0.02	0.22	-	-	-	-	-	
Methylene bis(4-cyclohexylisocyanate)	5124-30-1	-	-	-	-	-	-	-	0.01	0.11	-	
Methylene chloride	75-09-2	See Table Z-2			In process of 6(b) rulemaking							
Methyl ethyl ketone (MEK); see 2-butanone												
Methyl ethyl ketone peroxide (MEKP)	1338-23-4	-	-	-	-	-	-	-	0.7	5	-	
Methyl formate	107-31-3	100	250	-	100	250	150	375	-	-	-	

TABLE Z-1-A. Limits For Air Contaminants

Substance	CAS No.	Transitional Limits			Skin Designation	Final Rule Limits ^{aa}						Skin Designation	
		PEL ^a		b		TWA		STEL ^c		CEILING			b
		ppm ^b	mg/m ³			ppm ^a	mg/m ³	ppm ^a	mg/m ³	ppm ^a	mg/m ³		
Methyl hydrazine (Mono-methyl hydrazine)	60-34-4	(C)0.2	(C)0.35	X	-	-	-	-	0.2	0.35	X		
Methyl iodide	74-88-4	5	28	X	2	10	-	-	-	-	X		
Methyl isoamyl ketone	110-12-3	-	-	-	50	240	-	-	-	-	-		
Methyl isobutyl carbinol	108-11-2	25	100	X	25	100	40	165	-	-	X		
Methyl isobutyl ketone; see Hexone													
Methyl isocyanate	624-83-9	0.02	0.05	X	0.02	0.05	-	-	-	-	X		
Methyl isopropyl ketone	563-80-4	-	-	-	200	705	-	-	-	-	-		
Methyl mercaptan	74-93-1	(C)10	(C)20	-	0.5	1	-	-	-	-	-		
Methyl methacrylate	80-62-6	100	410	-	100	410	-	-	-	-	-		
Methyl parathion	298-00-0	-	-	-	-	0.2	-	-	-	-	X		
Methyl propyl ketone; see 2-Pentanone													
Methyl silicate	681-84-5	-	-	-	1	6	-	-	-	-	-		
alpha-Methyl styrene	98-83-9	(C)100	(C)480	-	50	240	100	485	-	-	-		
Methylene bisphenyl isocyanate (MDI)	101-68-8	(C)0.02	(C)0.2	-	-	-	-	-	0.02	0.2	-		
Metribuzin	21087-64-9	-	-	-	-	5	-	-	-	-	-		
Mica; see Silicates													
Molybdenum (as Mo)	7439-98-7												
Soluble compounds		-	5	-	-	5	-	-	-	-	-		
Insoluble compounds		-		-	-		-	-	-	-	-		
Total dust		-	15	-	-	10	-	-	-	-	-		
Respirable fraction		-	5	-	-	5	-	-	-	-	-		
Monocrotophos (Azodrin [®])	6923-22-4	-	-	-	-	0.25	-	-	-	-	-		
Monomethyl aniline	100-61-8	2	9	X	0.5	2	-	-	-	-	X		

TABLE Z-1-A. Limits For Air Contaminants

Substance	CAS No.	Transitional Limits			Skin Designation	Final Rule Limits ^{aa}						Skin Designation			
		PEL ^a		b		TWA		b	STEL ^c		b		CEILING		b
		ppm ^a	mg/m ³			ppm ^a	mg/m ³		ppm ^a	mg/m ³			ppm ^a	mg/m ³	
Morpholine	110-91-8	20	70	X	20	70	30	105	-	-	X				
Naphtha (Coal tar)	8030-30-6	100	400	-	100	400	-	-	-	-	-				
Naphthalene	91-20-3	10	50	-	10	50	15	75	-	-	-				
alpha-Naphthylamine; see 1910.1004	134-32-7														
beta-Naphthylamine; see 1910.1009	91-59-8														
Nickel carbonyl (as Ni)	13463-39-3	0.001	0.007	-	0.001	0.007	-	-	-	-	-				
Nickel, metal and insoluble compounds (as Ni)	7440-02-0	-	1	-	-	1	-	-	-	-	-				
Nickel, soluble compounds (as Ni)	7440-02-0	-	1	-	-	0.1	-	-	-	-	-				
Nicotine	54-11-5	-	0.5	X	-	0.5	-	-	-	-	X				
Nitric acid	7697-37-2	2	5	-	2	5	4	10	-	-	-				
Nitric oxide	10102-43-9	25	30	-	25	30	-	-	-	-	-				
p-Nitroaniline	100-01-6	1	6	X	-	3	-	-	-	-	X				
Nitrobenzene	98-95-3	1	5	X	1	5	-	-	-	-	X				
p-Nitrochlorobenzene	100-00-5	-	1	X	-	1	-	-	-	-	X				
4-Nitrodiphenyl; see 1910.1003	92-93-3														
Nitroethane	79-24-3	100	310	-	100	310	-	-	-	-	-				
Nitrogen dioxide	10102-44-0	(C)5	(C)9	-	-	-	1	1.8	-	-	-				
Nitrogen trifluoride	7783-54-2	10	29	-	10	29	-	-	-	-	-				
Nitroglycerin	55-63-0	(C)0.2	(C)1	X	-	-	-	0.1	-	-	X				
Nitromethane	75-52-5	100	250	-	100	250	-	-	-	-	-				
1-Nitropropane	108-03-2	25	90	-	25	90	-	-	-	-	-				

TABLE 2-1-A. Limits For Air Contaminants

Substance	CAS No.	Transitional Limits			Skin Designation	Final Rule Limits**						Skin Designation
		PEL ^a		TWA		STEL ^c		CEILING				
		ppm ^a	mg/m ³ ^b			ppm ^a	mg/m ³ ^b	ppm ^a	mg/m ³ ^b			
2-Nitropropane	79-44-4	25	90	-	110	35	-	-	-	-	-	-
N-Nitrosodimethylamine; see 1910.1016	62-55-6	-	-	-	-	-	-	-	-	-	-	-
Nitrotoluene o-isomer m-isomer p-isomer	88-72-2; 99-08-1; 99-99-0	5	30	X	2	11	-	-	-	-	-	X
Nitrotrichloromethane; see Chloropicrin	-	-	-	-	-	-	-	-	-	-	-	-
Nonane	111-84-2	-	-	-	200	1050	-	-	-	-	-	-
Octachloronaphthalene	2234-13-1	-	0.1	X	-	0.1	-	0.3	-	-	-	X
Octane	111-65-9	500	2350	-	300	1450	375	1800	-	-	-	-
Oil mist, mineral	8012-95-1	-	5	-	-	5	-	-	-	-	-	-
Osmium tetroxide (as Os)	20816-12-0	-	0.002	-	0.0002	0.002	0.0006	0.006	-	-	-	-
Oxalic acid	144-62-7	-	1	-	-	1	-	2	-	-	-	-
Oxygen difluoride	7783-41-7	0.05	0.1	-	-	-	-	-	0.05	0.1	-	-
Ozone	10028-15-6	0.1	0.2	-	0.1	0.2	0.3	0.6	-	-	-	-
Paraffin wax fume	8002-74-2	-	-	-	-	2	-	-	-	-	-	-
Paraquat, respirable dust	4685-14-7	-	0.5	X	-	0.1	-	-	-	-	-	X
Parathion	56-38-2	-	0.1	X	-	0.1	-	-	-	-	-	X
Particulates not otherwise regulated	-	-	-	-	-	-	-	-	-	-	-	-
Total dust	-	-	15	-	-	15	-	-	-	-	-	-
Respirable fraction	-	-	5	-	-	5	-	-	-	-	-	-
Pentaborane	19624-22-7	0.005	0.01	-	0.005	0.01	0.015	0.03	-	-	-	-
Pentachloronaphthalene	1321-64-8	-	0.5	X	-	0.5	-	-	-	-	-	X
Pentachlorophenol	87-86-5	-	0.5	X	-	0.5	-	-	-	-	-	X
Pentaerythritol	115-77-5	-	-	-	-	-	-	-	-	-	-	-
Total dust	-	-	15	-	-	10	-	-	-	-	-	-
Respirable fraction	-	-	5	-	-	5	-	-	-	-	-	-

TABLE Z-1-A. Limits For Air Contaminants

Substance	CAS No.	Transitional Limits			Final Rule Limits**						
		PEL ^a		Skin Designation	TWA		STEL ^c		CEILING		Skin Designation
		ppm ^a	mg/m ³ ^b		ppm ^a	mg/m ³ ^b	ppm ^a	mg/m ³ ^b	ppm ^a	mg/m ³ ^b	
Pentane	109-66-0	1000	2950	-	600	1800	750	2250	-	-	-
2-Pentanone (Methyl propyl ketone)	107-87-9	200	700	-	200	700	250	875	-	-	-
Perchloroethylene (Tetrachloroethylene)	127-18-4	See Table Z-2			25	170	-	-	-	-	-
Perchloromethyl mercaptan	594-42-3	0.1	0.8	-	0.1	0.8	-	-	-	-	-
Perchloryl fluoride	7616-94-6	3	13.5	-	3	14	6	28	-	-	-
Perlite	-	-	-	-	-	-	-	-	-	-	-
Total dust	-	-	15	-	-	15	-	-	-	-	-
Respirable fraction	-	-	5	-	-	5	-	-	-	-	-
Petroleum distillates (Naphtha)	8002-05-9	500	2000	-	400	1600	-	-	-	-	-
Phenol	108-95-2	5	19	X	5	19	-	-	-	-	X
Phenothiazine	92-84-2	-	-	-	-	5	-	-	-	-	X
p-Phenylene diamine	106-50-3	-	0.1	X	-	0.1	-	-	-	-	X
Phenyl ether, vapor	101-84-8	1	7	-	1	7	-	-	-	-	-
Phenyl ether-biphenyl mixture, vapor	-	1	7	-	1	7	-	-	-	-	-
Phenylethylene; see Styrene	-	-	-	-	-	-	-	-	-	-	-
Phenyl glycidyl ether (PGE)	122-60-1	10	60	-	1	6	-	-	-	-	-
Phenyldiazine	100-63-0	5	22	X	5	20	10	45	-	-	X
Phenyl mercaptan	108-98-5	-	-	-	0.5	2	-	-	-	-	-
Phenylphosphine	638-21-1	-	-	-	-	-	-	-	0.05	0.25	-
Phorate	298-02-2	-	-	-	-	0.05	-	0.2	-	-	X
Phosdrin (Mevinphos [®])	7786-34-7	-	0.1	X	0.01	0.1	0.03	0.3	-	-	X

TABLE 2-1-A. Limits For Air Contaminants

Substance	CAS No.	Transitional Limits			(Final Rule Limits) ^a							
		REL ^a		Skin Designation ^b	TWA		STEL ^c		CEILING		Skin Designation ^b	
		ppm ^d	mg/m ³		ppm ^d	mg/m ³	ppm ^d	mg/m ³	ppm ^d	mg/m ³		
Phosgene (Carbonyl chloride)	75-44-5	0.1	0.4	-	0.1	0.4	-	-	-	-	-	-
Phosphine	7803-51-2	0.3	0.4	-	0.3	0.4	1	1	-	-	-	-
Phosphoric acid	7664-38-2	-	1	-	-	1	-	3	-	-	-	-
Phosphorus (yellow)	7723-14-0	-	0.1	-	-	0.1	-	-	-	-	-	-
Phosphorus oxychloride	70025-87-3	-	-	-	0.1	0.6	-	-	-	-	-	-
Phosphorus pentachloride	10026-13-8	-	1	-	-	1	-	-	-	-	-	-
Phosphorus pentasulfide	1314-80-3	-	1	-	-	1	-	3	-	-	-	-
Phosphorus trichloride	7719-12-2	0.5	3	-	0.2	1.5	0.5	3	-	-	-	-
Phthalic anhydride	85-44-9	2	12	-	1	6	-	-	-	-	-	-
m-Phthalodinitrile	626-17-5	-	-	-	-	5	-	-	-	-	-	-
Picloram	1918-02-1	-	15	-	-	10	-	-	-	-	-	-
Total dust		-	5	-	-	5	-	-	-	-	-	-
Respirable fraction		-	5	-	-	5	-	-	-	-	-	-
Picric acid	88-09-1	-	0.1	X	-	0.1	-	-	-	-	X	-
Piperazine dihydrochloride	142-64-3	-	-	-	-	5	-	-	-	-	-	-
Pindone (2-Pivalyl-1,3-Indandione)	83-26-1	-	0.1	-	-	0.1	-	-	-	-	-	-
Plaster of Paris	7718-18-9	-	15	-	-	15	-	-	-	-	-	-
Total dust		-	5	-	-	5	-	-	-	-	-	-
Respirable fraction		-	5	-	-	5	-	-	-	-	-	-
Platinum (as Pt)	7440-06-0	-	0.002	-	-	1	-	-	-	-	-	-
Metal		-	0.002	-	-	0.002	-	-	-	-	-	-
Soluble salts		-	0.002	-	-	0.002	-	-	-	-	-	-
Portland cement	65997-15-1	-	-	-	-	10	-	-	-	-	-	-
Total dust		-	-	-	-	5	-	-	-	-	-	-
Respirable fraction		-	-	-	-	5	-	-	-	-	-	-

See Table Z-3
See Table Z-3

TABLE 2-1-A. Limits for Air Contaminants

Substance	CAS No.	Transitional Limits			Final Rule Limits ²⁰						
		PEL ^a		Skin Designation	TWA		STEL ^c		CEILING		Skin Designation
		ppm ^a	mg/m ³ ^b		ppm ^a	mg/m ³ ^b	ppm ^a	mg/m ³ ^b	ppm ^a	mg/m ³ ^b	
Potassium hydroxide	1310-58-3	-	-	-	-	-	-	-	-	2	-
Propane	74-98-6	1000	1800	-	1000	1800	-	-	-	-	-
Propargyl alcohol	107-19-7	-	-	-	1	2	-	-	-	-	X
beta-Propiolactone; see 1910.1013	57-57-8	-	-	-	-	-	-	-	-	-	-
Propionic acid	79-09-4	-	-	-	10	30	-	-	-	-	-
Propoxur (Baygon)	114-26-1	-	-	-	-	0.5	-	-	-	-	-
n-Propyl acetate	109-60-4	200	840	-	200	840	250	1050	-	-	-
n-Propyl alcohol	71-23-8	200	500	-	200	500	250	625	-	-	-
n-Propyl nitrate	627-13-4	25	110	-	25	105	40	170	-	-	-
Propylene dichloride	78-87-5	75	350	-	75	350	110	510	-	-	-
Propylene glycol dinitrate	6423-43-4	-	-	-	0.05	0.3	-	-	-	-	-
Propylene glycol mono-methyl ether	107-98-2	-	-	-	100	360	150	540	-	-	-
Propylene imine	75-55-8	2	5	X	2	5	-	-	-	-	X
Propylene oxide	75-56-9	100	240	-	20	50	-	-	-	-	-
Propyne; see Methyl acetylene	-	-	-	-	-	-	-	-	-	-	-
Pyrethrum	8003-34-7	-	5	-	-	5	-	-	-	-	-
Pyridine	110-86-1	5	15	-	5	15	-	-	-	-	-
Quinone	106-51-4	0.1	0.4	-	0.1	0.4	-	-	-	-	-
Resorcinol	108-46-3	-	-	-	10	45	20	90	-	-	-
Rhodium (as Rh), metal fume and insoluble compounds	7440-16-6	-	0.1	-	-	0.1	-	-	-	-	-
Rhodium (as Rh), soluble compounds	7440-16-6	-	0.001	-	-	0.001	-	-	-	-	-

TABLE 2-1-A. Limits For Air Contaminants

Substance	CAS No.	Transitional Limits		Skin Designation	Final Rule Limits**						Skin Designation
		PEL ^a			TWA		STEL ^c		CEILING		
		ppm ^a	mg/m ³ ^b		ppm ^a	mg/m ³ ^b	ppm ^a	mg/m ³ ^b	ppm ^a	mg/m ³ ^b	
Ronnel	299-84-3	-	15	-	-	10	-	-	-	-	-
Rosin core solder pyrolysis products, as formaldehyde	-	-	-	-	-	0.1	-	-	-	-	-
Rotenone	83-79-4	-	5	-	-	5	-	-	-	-	-
Rouge	-	-	-	-	-	-	-	-	-	-	-
Total dust	-	-	15	-	-	10	-	-	-	-	-
Respirable fraction	-	-	5	-	-	5	-	-	-	-	-
Selenium compounds (as Se)	7782-49-2	-	0.2	-	-	0.2	-	-	-	-	-
Selenium hexafluoride (as Se)	7783-79-1	0.05	0.4	-	0.05	0.4	-	-	-	-	-
Silica, amorphous, precipitated and gel	-	See Table 2-3		-	-	6	-	-	-	-	-
Silica, amorphous, diatomaceous earth, containing less than 1% crystalline silica	68855-54-9	See Table 2-3		-	-	6	-	-	-	-	-
Silica, crystalline cristobalite (as quartz), respirable dust	14464-46-1	See Table 2-3		-	-	0.05	-	-	-	-	-
Silica, crystalline quartz (as quartz), respirable dust	14808-60-7	See Table 2-3		-	-	0.1	-	-	-	-	-
Silica, crystalline tripoli (as quartz), respirable dust	1317-95-9	See Table 2-3		-	-	0.1	-	-	-	-	-
Silica, crystalline tridymite (as quartz), respirable dust	15468-32-3	See Table 2-3		-	-	0.05	-	-	-	-	-
Silica, fused, respirable dust	60676-86-0	See Table 2-3		-	-	0.1	-	-	-	-	-

TABLE Z-1-A. Limits For Air Contaminants

Substance	CAS No.	Transitional Limits		Skin Designation	Final Rule Limits ^a						Skin Designation
		PEL ^a			TWA		STEL ^c		CEILING		
		ppm ^b	mg/m ³		ppm ^b	mg/m ³	ppm ^b	mg/m ³	ppm ^b	mg/m ³	
Silicates (less than 1% crystalline silica)											
Mica (respirable dust)	12001-26-2		See Table Z-3	-	3	-	-	-	-	-	-
Soapstone, total dust	-		See Table Z-3	-	6	-	-	-	-	-	-
Soapstone, respirable dust	-		See Table Z-3	-	3	-	-	-	-	-	-
Talc (containing asbestos): use asbestos limit	-		See Table Z-3	See 29 CFR 1910.1001							
Talc (containing no asbestos), asbestos, respirable dust	14807-96-6		See Table Z-3	-	2	-	-	-	-	-	-
Tremolite			See Table Z-3	See 29 CFR 1910.1101							
Silicon											
Total dust	7440-21-3	-	15	-	-	10	-	-	-	-	-
Respirable fraction		-	5	-	-	5	-	-	-	-	-
Silicon carbide											
Total dust	409-21-2	-	15	-	-	10	-	-	-	-	-
Respirable fraction		-	5	-	-	5	-	-	-	-	-
Silicon tetrahydride											
	7803-62-5	-	-	-	5	7	-	-	-	-	-
Silver, metal dust and fume (as Ag)											
	7440-22-4	-	0.01	-	-	0.01	-	-	-	-	-
Soapstone; see Silicates											
Sodium azide											
(as HN ₃)	26628-22-8	-	-	-	-	-	-	-	0.1	-	X
(as NaN ₃)		-	-	-	-	-	-	-	-	0.3	X
Sodium bisulfite											
	7631-90-5	-	-	-	-	5	-	-	-	-	-
Sodium fluoroacetate											
	62-74-8	-	0.05	X	-	0.05	-	0.15	-	-	X
Sodium hydronide											
	1310-73-2	-	2	-	-	-	-	-	-	2	-
Sodium metabisulfite											
	7681-57-4	-	-	-	-	5	-	-	-	-	-
Starch											
Total dust	9005-25-8	-	15	-	-	15	-	-	-	-	-
Respirable fraction		-	5	-	-	5	-	-	-	-	-
Stibine											
	7803-52-3	0.1	0.5	-	0.1	0.5	-	-	-	-	-
Stoddard solvent											
	8052-41-3	500	2900	-	100	525	-	-	-	-	-
Strychnine											
	57-24-9	-	0.15	-	-	0.15	-	-	-	-	-
Styrene											
	100-42-5	See Table Z-2			50	215	100	425	-	-	-

TABLE 2-1-A. Limits For Air Contaminants

Substance	CAS No.	Transitional Limits		Skin Designation	Final Rule Limits ^{aa}						Skin Designation	
		PEL ^a			TWA		STEL ^c		CEILING			
		ppm ^b	mg/m ³		ppm ^b	mg/m ³	ppm ^b	mg/m ³	ppm ^b	mg/m ³		
Subtilisins (Proteolytic enzymes)	1395-21-7	-	-	-	-	-	-	-	-	-	0.00006	-
Sucrose	57-50-1	-	-	-	-	-	-	-	-	-	-	-
Total dust		-	15	-	-	15	-	-	-	-	-	-
Respirable fraction		-	5	-	-	5	-	-	-	-	-	-
Sulfur dioxide	7446-09-5	5	13	-	2	5	5	10	-	-	-	-
Sulfur hexafluoride	2551-62-4	1000	6000	-	1000	6000	-	-	-	-	-	-
Sulfuric acid	7664-93-9	-	1	-	-	1	-	-	-	-	-	-
Sulfur monochloride	10025-67-9	1	6	-	-	-	-	-	1	6	-	-
Sulfur pentafluoride	5714-22-7	0.025	0.25	-	-	-	-	-	0.01	0.1	-	-
Sulfur tetrafluoride	7783-60-0	-	-	-	-	-	-	-	0.1	0.4	-	-
Sulfuryl fluoride	2699-79-8	5	20	-	5	20	10	40	-	-	-	-
Sulprofos	35400-43-2	-	-	-	-	1	-	-	-	-	-	-
Systox [®] , see Dornon												
2,4,5-T	93-76-5	-	10	-	-	10	-	-	-	-	-	-
Talc; see Silicates												
Tantalum, metal and oxide dust	7440-25-7	-	5	-	-	5	-	-	-	-	-	-
TEBP (Sulfotep)	3689-24-5	-	0.2	X	-	0.2	-	-	-	-	-	X
Tellurium and compounds (as Te)	13494-80-9	-	0.1	-	-	0.1	-	-	-	-	-	-
Tellurium hexafluoride (as Te)	7783-80-4	0.02	0.2	-	0.02	0.2	-	-	-	-	-	-
Temephos	3383-96-8	-	-	-	-	-	-	-	-	-	-	-
Total dust		-	15	-	-	10	-	-	-	-	-	-
Respirable fraction		-	5	-	-	5	-	-	-	-	-	-
TEPP	107-49-3	-	0.05	X	-	0.05	-	-	-	-	-	X
Terphenyls	26140-60-3	(C)1	(C)9	-	-	-	-	-	0.5	5	-	-
1,1,1,2-Tetrachloro-2,2-difluoroethane	76-11-9	500	4170	-	500	4170	-	-	-	-	-	-

TABLE Z-1-A. Limits For Air Contaminants

Substance	CAS No.	Transitional Limits			Final Rule Limits**						
		PEL ^a		Skin Designation	TWA		STEL ^c		CEILING		Skin Designation
		ppm ^a	mg/m ³ ^b		ppm ^a	mg/m ³ ^b	ppm ^a	mg/m ³ ^b	ppm ^a	mg/m ³ ^b	
1,1,2,2-Tetrachloro-1,2-difluoroethane	76-12-0	500	4170	-	500	4170	-	-	-	-	-
1,1,2,2-Tetrachloroethane	79-34-5	5	35	X	1	7	-	-	-	-	X
Tetrachloroethylene; see Perchloroethylene											
Tetrachloromethane; see Carbon tetrachloride											
Tetrachloronaphthalene	1335-88-2	-	2	X	-	2	-	-	-	-	X
Tetraethyl lead (as Pb)	78-00-2	-	0.015	X	-	0.015	-	-	-	-	X
Tetrahydrofuran	109-99-9	200	590	-	200	590	250	735	-	-	-
Tetramethyl lead, (as Pb)	75-74-1	-	0.015	X	-	0.075	-	-	-	-	X
Tetramethyl succinonitrile	3333-52-6	0.5	3	X	0.5	3	-	-	-	-	X
Tetranitromethane	509-14-8	1	8	-	1	8	-	-	-	-	-
Tetrasodium pyrophosphate	7722-88-5	-	-	-	-	5	-	-	-	-	-
1etryl (2,4,6-Trinitrophenyl-methyl-nitramine)	479-45-8	-	1.5	X	-	0.1	-	-	-	-	X
Thallium, soluble compounds (as Tl)	7440-28-0	-	0.1	X	-	0.1	-	-	-	-	X
4,4'-Thiobis(6-tert, Butyl-m-cresol)	96-69-5	-	15	-	-	10	-	-	-	-	-
Total dust		-	5	-	-	5	-	-	-	-	-
Respirable fraction		-	-	-	-	-	-	-	-	-	-
Thioglycolic acid	68-11-1	-	-	-	1	4	-	-	-	-	X
Thionyl chloride	7719-09-7	-	-	-	-	-	-	-	1	5	-
Thiram	137-26-8	-	5	-	-	5	-	-	-	-	-
Tin, inorganic compounds (except oxides) (as Sn)	7440-31-5	-	-	-	-	2	-	-	-	-	-
Tin, organic compounds (as Sn)	7440-31-5	-	0.1	-	-	0.1	-	-	-	-	X

TABLE Z-1-A. Limits For Air Contaminants

Substance	CAS No.	Transitional Limits			Skin Designation	Final Rule Limits ^{aa}						Skin Designation	
		PEL ^a		b		TWA		STEL ^c		CEILING			b
		ppm ^b	mg/m ³			ppm ^b	mg/m ³	ppm ^b	mg/m ³	ppm ^b	mg/m ³		
Tin oxide (as Sn)	7440-31-5	-	-	-	-	2	-	-	-	-	-	-	
Titanium dioxide	13463-67-1	-	-	-	-	-	-	-	-	-	-	-	
Total dust		-	15	-	-	10	-	-	-	-	-	-	
Respirable fraction		-	5	-	-	5	-	-	-	-	-	-	
Toluene	108-88-3	See Table Z-2			-	100	375	150	560	-	-	-	
Toluene-2,4-diisocyanate (TDI)	584-84-9	(C)0.02	(C)0.14	-	-	0.005	0.04	0.02	0.15	-	-	-	
m-Toluidine	108-44-1	-	-	-	-	2	9	-	-	-	-	X	
o-Toluidine	95-53-4	5	22	X	-	5	22	-	-	-	-	X	
p-Toluidine	106-49-0	-	-	-	-	2	9	-	-	-	-	X	
Toxaphene; see Chlorinated Camphene													
Tremolite; see Silicates													
Tributyl phosphate	126-73-8	-	5	-	-	0.2	2.5	-	-	-	-	-	
Trichloroacetic acid	76-03-9	-	-	-	-	1	7	-	-	-	-	-	
1,2,4-Trichlorobenzene	120-82-1	-	-	-	-	-	-	-	-	5	40	-	
1,1,1-Trichloroethane; see Methyl chloroform													
1,1,2-Trichloroethane	79-00-5	10	45	X	-	10	45	-	-	-	-	X	
Trichloroethylene	79-01-6	See Table Z-2			-	50	270	200	1080	-	-	-	
Trichloromethane; see Chloroform													
Trichloronaphthalene	1321-65-9	-	5	X	-	5	-	-	-	-	-	X	
1,2,3-Trichloropropane	96-18-4	50	300	-	-	10	60	-	-	-	-	-	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	1000	7600	-	-	1000	7600	1250	9500	-	-	-	
Triethylamine	121-44-8	25	100	-	-	10	40	15	60	-	-	-	
Trifluorobromomethane	75-63-8	1000	6100	-	-	1000	6100	-	-	-	-	-	
Trimellitic anhydride	552-30-7	-	-	-	-	0.005	0.04	-	-	-	-	-	

TABLE Z-1-A. Limits For Air Contaminants

Substance	CAS No.	Transitional Limits			Skin Designation	Final Rule Limits**						Skin Designation	
		PEL ^a		b		TWA		STEL ^c		CEILING			b
		ppm ^d	mg/m ³			ppm ^d	mg/m ³	ppm ^d	mg/m ³	ppm ^d	mg/m ³		
Trimethylamine	75-50-3	-	-	-	-	10	24	15	36	-	-	-	-
Trimethyl benzene	25551-13-7	-	-	-	-	25	125	-	-	-	-	-	-
Trimethyl phosphite	121-45-9	-	-	-	-	2	10	-	-	-	-	-	-
2,4,6-Trinitrophenyl; see Picric acid													
2,4,6-Trinitrophenylmethyl nitramine; see Tetryl													
2,4,6-Trinitrotoluene (TNT)	118-96-7	-	1.5	X	-	0.5	-	-	-	-	-	-	X
Triorthocresyl phosphate	78-30-8	-	0.1	-	-	0.1	-	-	-	-	-	-	X
Triphenyl amine	603-34-9	-	-	-	-	5	-	-	-	-	-	-	-
Triphenyl phosphate	115-86-6	-	3	-	-	3	-	-	-	-	-	-	-
Tungsten (as W) Insoluble compounds Soluble compounds	7440-33-7	-	-	-	-	5 1	- -	10 3	- -	-	-	-	-
Turpentine	8006-64-2	100	560	-	-	100	560	-	-	-	-	-	-
Uranium (as U) Soluble compounds Insoluble compounds	7440-61-1	-	0.05 0.25	-	-	0.05 0.2	-	-	0.6	-	-	-	-
n-Valeraldehyde	110-62-3	-	-	-	-	50	175	-	-	-	-	-	-
Vanadium Respirable dust (as V ₂ O ₅) Fume (as V ₂ O ₅)	1314-62-1	-	(C)0.5 (C)0.1	-	-	0.05 0.05	-	-	-	-	-	-	-
Vegetable oil mist Total dust Respirable fraction	-	-	15 5	-	-	15 5	-	-	-	-	-	-	-
Vinyl acetate	108-05-4	-	-	-	-	10	30	20	60	-	-	-	-
Vinyl benzene; see Styrene													
Vinyl bromide	593-60-2	-	-	-	-	5	20	-	-	-	-	-	-
Vinyl chloride; see 1910.1017	75-01-4												

TABLE 2-1-A. Limits for Air Contaminants

Substance	CAS No.	Transitional Limits			Skin Designation	Final Rule Limits**						Skin Designation
		PEL ^a		TWA		STEL ^c		CEILING				
		ppm ^b	mg/m ³			ppm ^b	mg/m ³	ppm ^b	mg/m ³			
Vinylcyanide; see Acrylonitrile												
Vinyl cyclohexene dioxide	106-87-6	-	-	-	10	60	-	-	-	-	-	X
Vinylidene chloride (1,1-Dichloro- ethylene)	75-35-4	-	-	-	1	4	-	-	-	-	-	-
Vinyl toluene	25013-15-4	100	480	-	100	480	-	-	-	-	-	-
VN & P Naphtha	8032-32-4	-	-	-	300	1350	400	1800	-	-	-	-
Warfarin	91-81-2	-	0.1	-	-	0.1	-	-	-	-	-	-
Welding fumes (total particulate)***	-	-	-	-	-	5	-	-	-	-	-	-
Wood dust, all soft and hard woods, except Western red cedar	-	-	-	-	-	5	-	10	-	-	-	-
Wood dust, Western red cedar	-	-	-	-	-	2.5	-	-	-	-	-	-
Xylenes (o-, m-, p- isomers)	1330-20-7	100	435	-	100	435	150	655	-	-	-	-
m-Xylene alpha, alpha - diamine	1477-55-0	-	-	-	-	-	-	-	-	0.1	X	-
Xylidine	1300-73-8	5	25	X	2	10	-	-	-	-	-	X
Yttrium	7440-65-5	-	1	-	-	1	-	-	-	-	-	-
Zinc chloride fume	7646-85-7	-	1	-	-	1	-	2	-	-	-	-
Zinc chromate (as CrO3)	Varies with Compound	See Table Z-2			-	-	-	-	-	0.1	-	-
Zinc oxide fume	1314-13-2	-	5	-	-	5	-	10	-	-	-	-
Zinc oxide Total dust	1314-13-2	-	15	-	-	10	-	-	-	-	-	-
Respirable fraction		-	5	-	-	5	-	-	-	-	-	-
Zinc stearate Total dust	557-05-1	-	15	-	-	10	-	-	-	-	-	-
Respirable fraction		-	5	-	-	5	-	-	-	-	-	-

TABLE Z-1-A. Limits for Air Contaminants

Substance	CAS No.	Transitional Limits		Skin Designation	Final Rule Limits**						Skin Designation
		PEL ^a			TWA		STEL ^c		CEILING		
		ppm ^a	mg/m ³ ^b		ppm ^a	mg/m ³ ^b	ppm ^a	mg/m ³ ^b	ppm ^a	mg/m ³ ^b	
Zirconium compounds (as Zr)	1440-6	-	5	-	5	-	10	-	-	-	

^a The transitional PELs are 8-hour TWAs unless otherwise noted; a (C) designation denotes a ceiling limit.

^{**} Unless otherwise noted, employers in General Industry (i.e., those covered by 29 CFR 1910) may use any combination of controls to achieve these limits for a period not to exceed 4 years from the effective date of this standard; for employers operating Marine Terminals (i.e., those covered by 29 CFR 1918), any combination of controls may be used until further notice.

^{***} As determined from breathing-zone air samples:

^a Parts of vapor or gas per million parts of contaminated air by volume at 25°C and 760 torr.

^b Approximate milligrams of substance per cubic meter of air.

^c Duration is for 15 minutes, unless otherwise noted.

^d The final benzene standard in 1910.1028 applies to all occupational exposures to benzene except some subsegments of industry where exposures are consistently under the action level (i.e., distribution and sale of fuels, sealed containers and pipelines, coke production, oil and gas drilling and production, natural gas processing, and the percentage exclusion for liquid mixtures); for the excepted subsegments, the benzene limits in Table Z-2 apply.

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