

Chronic Ambient Air Guidelines (2024)

Chemical	CASRN	2024 AAG ppm-v	2024 AAG ug/m3	Basis
Acetaldehyde	75-07-0	2.52E-03	4.55E+00	cancer
Acetonitrile	75-05-8	3.57E-02	6.00E+01	noncancer
Acrolein	107-02-8	8.70E-06	2.00E-02	noncancer
Acrylonitrile	107-13-1	6.76E-05	1.47E-01	cancer
Allyl chloride	107-05-1	3.19E-04	1.00E+00	noncancer
Ammonia	7664-41-7	7.16E-01	5.00E+02	noncancer
Antimony trioxide	1309-64-4	1.67E-05	2.00E-01	noncancer
Arsenic (inorganic)	7440-38-2	7.59E-07	2.33E-03	cancer
Barium (and soluble compounds, as Ba)	7440-39-3	8.88E-05	5.00E-01	noncancer
Benzene	71-43-2	4.00E-04	1.28E+00	cancer
Benzo(a)pyrene	50-32-8	1.93E-07	2.00E-03	noncancer
Benzyl chloride	100-44-7	3.93E-05	2.04E-01	cancer
Beryllium	7440-41-7	1.13E-05	4.17E-03	cancer
Biphenyl	92-52-4	6.33E-05	4.00E-01	noncancer
Bis(2-ethylhexyl)phthalate	117-81-7	2.61E-04	4.17E+00	cancer
Bromodichloromethane	75-27-4	4.02E-05	2.70E-01	cancer
Bromoform	75-25-2	8.78E-04	9.09E+00	cancer
Butadiene, 1,3-	106-99-0	1.50E-04	3.33E-01	cancer
Cadmium (compounds)	7440-43-9	1.21E-06	5.56E-03	cancer
Carbon disulfide	75-15-0	2.24E-01	7.00E+02	noncancer
Carbon tetrachloride	56-23-5	2.65E-04	1.67E+00	cancer
CFC-113	76-13-1	6.51E-01	5.00E+03	noncancer
Chlorine	7782-50-5	4.99E-05	1.45E-01	noncancer
Chlorine dioxide	10049-04-4	7.23E-05	2.00E-01	noncancer
Chlorobenzene	108-90-7	1.08E-02	5.00E+01	noncancer
Chloroethane	75-00-3	1.51E+00	4.00E+03	noncancer
Chloroform	67-66-3	8.89E-05	4.35E-01	cancer
Chromium (VI), mist & aerosol	18540-29-9	5.44E-08	1.16E-04	cancer
Chromium (VI), particulate	18540-29-9	5.44E-08	1.16E-04	cancer
Cobalt	7440-48-4	4.60E-07	1.11E-03	cancer
Cyclohexane	110-82-7	1.74E+00	6.00E+03	noncancer
Dibromoethane, 1,2-	106-93-4	2.17E-06	1.67E-02	cancer
Dichlorobenzene, 1,2-	95-50-1	3.32E-02	2.00E+02	noncancer
Dichlorobenzene, 1,4-	106-46-7	1.51E-04	9.09E-01	cancer
Dichlorodifluoromethane	75-71-8	2.02E-02	1.00E+02	noncancer
Dichloroethane, 1,1-	75-34-3	1.54E-03	6.25E+00	cancer
Dichloroethane, 1,2-	107-06-2	9.49E-05	3.85E-01	cancer
Dichloroethylene, 1,1-	75-35-4	5.03E-02	2.00E+02	noncancer
Dichloropropane, 1,2-	78-87-5	5.83E-04	2.70E+00	cancer
Dichloropropene, 1,3-	542-75-6	5.50E-04	2.50E+00	cancer
Dioxane, 1,4-	123-91-1	5.54E-04	2.00E+00	cancer
Dioxins & Furans (as 2,3,7,8-TCDD)	1746-01-6	1.99E-11	2.63E-07	cancer
Diphenylmethane diisocyanate (monomer & polymer)	101-68-8	5.85E-05	6.00E-01	noncancer
Epichlorohydrin	106-89-8	2.64E-04	1.00E+00	noncancer
Epoxypropane, 1,2-	75-56-9	1.13E-03	2.70E+00	cancer
Ethoxyethanol, 2-	110-80-5	1.08E-02	4.00E+01	noncancer
Ethyl acetate	141-78-6	1.94E-02	7.00E+01	noncancer
Ethyl benzene	100-41-4	9.19E-04	4.00E+00	cancer
Ethylene oxide	75-21-8	1.79E-06	3.24E-03	cancer
Fluorides (as F)	7782-41-4	8.35E-03	1.30E+01	noncancer
Formaldehyde	50-00-0	6.25E-04	7.69E-01	cancer
Formic acid	64-18-6	1.59E-04	3.00E-01	noncancer
Furfural	98-01-1	1.27E-02	5.00E+01	noncancer
Heptane (n-Heptane)	142-82-5	9.74E-02	4.00E+02	noncancer

Ambient Air Guidelines (AAGs) represent chemical concentrations in ambient air, below which there is minimal risk of a deleterious health effect resulting from long-term inhalation exposure. The AAGs are calculated using an increased incremental lifetime cancer risk of one in a hundred thousand (1×10^{-5}). The AAGs are derived to be protective for effects due to chronic exposure ("chronic" refers to long-term exposure), assuming a resident may be exposed to air 24 hours a day, 365 days per year for 70 years; therefore, these guidelines are most appropriately compared with long-term average ambient air measurements (e.g., annual averages).

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Chemical	CASRN	2024 AAG ppm-v	2024 AAG ug/m3	Basis
Hexachlorobutadiene	87-68-3	4.26E-05	4.55E-01	cancer
Hexane (n-Hexane)	110-54-3	1.98E-01	7.00E+02	noncancer
Hexanone, 2-	591-78-6	7.31E-03	3.00E+01	noncancer
Hydrazine	302-01-2	1.55E-06	2.04E-03	cancer
Hydrogen chloride	7647-01-0	1.38E-02	2.00E+01	noncancer
Hydrogen cyanide	74-90-8	7.22E-04	8.00E-01	noncancer
Hydrogen sulfide	7783-06-4	1.43E-03	2.00E+00	noncancer
Isopropanol	67-63-0	8.12E-02	2.00E+02	noncancer
Manganese	7439-96-5	2.22E-05	5.00E-02	noncancer
Mercury (elemental)	7439-97-6	3.65E-05	3.00E-01	noncancer
Methanol	67-56-1	1.52E+01	2.00E+04	noncancer
Methoxyethanol	109-86-4	2.24E-03	7.00E+00	noncancer
Methyl bromide (bromomethane)	74-83-9	1.29E-03	5.00E+00	noncancer
Methyl chloride	74-87-3	4.35E-02	9.00E+01	noncancer
Methyl ethyl ketone	78-93-3	1.69E+00	5.00E+03	noncancer
Methyl isobutyl ketone	108-10-1	7.31E-01	3.00E+03	noncancer
Methyl methacrylate	80-62-6	1.71E-01	7.00E+02	noncancer
Methylene chloride	75-09-2	1.72E-01	6.00E+02	noncancer
Methyl-t-butyl ether (MTBE)	1634-04-4	1.07E-02	3.85E+01	cancer
Naphthalene	91-20-3	5.60E-05	2.94E-01	cancer
Nickel (insoluble refinery dust)	E715532	ND	1.40E-02	noncancer
Nickel and compounds (as Ni)	7440-02-0	1.60E-05	3.85E-02	cancer
Nickel oxide	1313-99-1	6.53E-06	2.00E-02	noncancer
Nickel subsulfide	12035-72-2	1.42E-06	1.40E-02	noncancer
Phenol	108-95-2	5.19E-02	2.00E+02	noncancer
Propylene	115-07-1	1.74E+00	3.00E+03	noncancer
Selenium (and compounds other than hydrogen selenide)	7782-49-2	6.18E-03	2.00E+01	noncancer
Styrene	100-42-5	2.34E-01	1.00E+03	noncancer
Sulfuric acid	7664-93-9	2.49E-04	1.00E+00	noncancer
Tetrachloroethane, 1,1,2,2-	79-34-5	2.50E-05	1.72E-01	cancer
Tetrachloroethylene	127-18-4	5.66E-03	3.85E+01	cancer
Tetrahydrofuran	109-99-9	6.77E-01	2.00E+03	noncancer
Titanium tetrachloride	7550-45-0	1.29E-05	1.00E-01	noncancer
Toluene	108-88-3	1.32E+00	5.00E+03	noncancer
Trichlorobenzene, 1,2,4-	120-82-1	2.69E-04	2.00E+00	noncancer
Trichloroethane, 1,1,1-	71-55-6	9.14E-01	5.00E+03	noncancer
Trichloroethane, 1,1,2-	79-00-5	3.66E-05	2.00E-01	noncancer
Trichloroethylene	79-01-6	3.71E-04	2.00E+00	noncancer
Trichlorotrifluoroethane	76-13-1	6.51E-01	5.00E+03	noncancer
Trimethylbenzene, 1,2,4-	95-63-6	1.22E-02	6.00E+01	noncancer
Trimethylbenzene, 1,3,5-	108-67-8	1.22E-02	6.00E+01	noncancer
Vanadium	7440-62-2	4.79E-05	1.00E-01	noncancer
Vinyl acetate	108-05-4	5.67E-02	2.00E+02	noncancer
Vinyl bromide	593-60-2	1.52E-04	6.67E-01	cancer
Vinyl chloride	75-01-4	4.45E-04	1.14E+00	cancer
Xylenes	1330-20-7	2.30E-02	1.00E+02	noncancer

Notes:

- AAG = Ambient Air Guideline
- ppm - parts per million
- ug/L - microgram per liter
- CASRN - Chemical Abstract System Registration Number
- AAG - Ambient Air Guideline
- ppm-v - parts per million volume (note: concentration in ppm-v = ug/m3 x 24.4/molecular weight /1000)
- ug/m3 - microgram per cubic meter
- ND - No Data

Ambient Air Guidelines (AAGs) represent chemical concentrations in ambient air, below which there is minimal risk of a deleterious health effect resulting from long-term inhalation exposure. The AAGs are calculated using an increased incremental lifetime cancer risk of one in a hundred thousand (1 x 10⁻⁵). The AAGs are derived to be protective for effects due to chronic exposure ("chronic" refers to long-term exposure), assuming a resident may be exposed to air 24 hours a day, 365 days per year for 70 years; therefore, these guidelines are most appropriately compared with long-term average ambient air measurements (e.g., annual averages).