

Chronic Ambient Air Guidelines

Maine Center for Disease Control, Department of Health and Human Services

April 2010

Chemical	CASRN	AAG Status	Chronic AAG (ppm)	Conversion Factor (from ppm to mg/m3)	Chronic AAG (mg/m3)	Chronic AAG (ug/m3)	Toxicity Endpoint	Basis for AAG
Acetaldehyde	75-07-0	final	2.E-03	1.9	5.E-03	5.E+00	C	IRIS unit risk
Acetic anhydride	108-24-7	interim	1.E-02	4.2	5.E-02	5.E+01	NC	ACGIH TLV
Acetone	67-64-1	final	1.E+01	2.4	3.E+01	3.E+04	NC	ATSDR MRL
Acetonitrile	75-05-8	final	4.E-02	1.7	6.E-02	6.E+01	NC	IRIS RfC
Acrolein	107-02-8	final	2.E-04	2.3	4.E-04	4.E-01	NC	CA-OEHHA REL
Acrylonitrile	107-13-1	final	2.E-05	2.2	3.E-05	3.E-02	C	CA-OEHHA unit risk
Allyl chloride	107-05-1	final	3.E-04	3.1	1.E-03	1.E+00	NC	IRIS RfC
Ammonia	7664-41-7	final	1.E-01	0.7	1.E-01	1.E+02	NC	IRIS RfC
Antimony (and compounds, as Sb)	7440-36-0	interim	NA	NA	1.E-03	1.E+00	NC	ACGIH TLV
Antimony hydride	7803-52-3	interim	2.E-04	5.1	1.E-03	1.E+00	NC	ACGIH TLV
Antimony trioxide	1309-64-4	final	NA	NA	2.E-04	2.E-01	NC	IRIS RfC
Arsenic (inorganic)	7440-38-2	final	NA	NA	3.E-06	3.E-03	C	CA-OEHHA unit risk
Barium (and soluble compounds, as Ba)	7440-39-3	interim	NA	NA	1.E-03	1.E+00	NC	ACGIH TLV
Barium sulfate	7727-43-7	interim	NA	NA	2.E-02	2.E+01	NC	ACGIH TLV
Benzene	71-43-2	final	4.E-04	3.2	1.E-03	1.E+00	C	IRIS unit risk
Benzo(a)pyrene	50-32-8	final	9.E-07	10.3	9.E-06	9.E-03	C	CA-OEHHA unit risk
Benzyl chloride	100-44-7	final	4.E-05	5.3	2.E-04	2.E-01	C	CA-OEHHA unit risk
Beryllium	7440-41-7	final	NA	NA	4.E-06	4.E-03	C	IRIS unit risk
Biphenyl	92-52-4	interim	5.E-04	6.3	3.E-03	3.E+00	NC	ACGIH TLV
Bis(2-ethylhexyl)phthalate	117-81-7	final	3.E-04	16.0	4.E-03	4.E+00	C	CA-OEHHA unit risk
Bromodichloromethane	75-27-4	interim	8.E-05	6.7	6.E-04	6.E-01	C	adjusted IRIS slope factor
Bromoform	75-25-2	final	9.E-04	10.2	9.E-03	9.E+00	C	IRIS unit risk
Butadiene, 1,3-	106-99-0	final	2.E-04	2.2	3.E-04	3.E-01	C	IRIS unit risk
Butanol, 1-	71-36-3	interim	5.E-02	3.0	1.E-01	1.E+02	NC	ACGIH TLV
Butyl acetate, n-	123-86-4	interim	4.E-01	4.8	2.E+00	2.E+03	NC	ACGIH TLV
Cadmium (compounds)	7440-43-9	final	NA	NA	6.E-06	6.E-03	C	IRIS unit risk
Carbon disulfide	75-15-0	final	2.E-01	3.1	7.E-01	7.E+02	NC	IRIS RfC
Carbon tetrachloride	56-23-5	final	1.E-04	6.3	7.E-04	7.E-01	C	IRIS unit risk
CFC-113	76-13-1	interim	2.E+00	7.7	2.E+01	2.E+04	NC	ACGIH TLV
CFC-114	76-14-2	interim	2.E+00	7.0	2.E+01	2.E+04	NC	ACGIH TLV
Chlorine	7782-50-5	final	7.E-05	2.9	2.E-04	2.E-01	NC	CA-OEHHA REL
Chlorine dioxide	10049-04-4	final	7.E-05	2.8	2.E-04	2.E-01	NC	IRIS RfC
Chlorobenzene	108-90-7	final	2.E-01	4.6	1.E+00	1.E+03	NC	CA-OEHHA REL
Chloroethane	75-00-3	final	4.E+00	2.6	1.E+01	1.E+04	NC	IRIS RfC
Chloroform	67-66-3	final	4.E-04	4.9	2.E-03	2.E+00	C	CA-OEHHA unit risk
Chromium (as CrIII)	7440-47-3	interim	NA	NA	1.E-03	1.E+00	NC	ACGIH TLV

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Chromium (VI), mist &aerosol	18540-29-9	final	NA	NA	8.E-07	8.E-04	C	IRIS unit risk
Chromium (VI), particulate	18540-29-10	final	NA	NA	8.E-07	8.E-04	C	IRIS unit risk
Cobalt	7440-48-4	final	NA	NA	1.E-04	1.E-01	NC	ATSDR MRL
Copper (dust and mists, as Cu)	7440-50-8	interim	NA	NA	2.E-03	2.E+00	NC	ACGIH TLV
Copper (fume, as Cu)	7440-50-8	interim	NA	NA	5.E-04	5.E-01	NC	ACGIH TLV
Cyclohexane	110-82-7	final	2.E+00	3.4	6.E+00	6.E+03	NC	IRIS RfC
Dibromochloromethane	124-48-1	interim	4.E-05	10.3	4.E-04	4.E-01	C	adjusted IRIS slope factor
Dibromoethane, 1,2-	106-93-4	final	2.E-06	7.8	2.E-05	2.E-02	C	IRIS unit risk
Dichlorobenzene, 1,2-	95-50-1	interim	6.E-02	6.0	4.E-01	4.E+02	NC	ACGIH TLV
Dichlorobenzene, 1,4-	106-46-7	final	2.E-04	6.0	9.E-04	9.E-01	C	CA-OEHHA unit risk
Dichlorodifluoromethane	75-71-8	interim	2.E+00	5.0	1.E+01	1.E+04	NC	ACGIH TLV
Dichloroethane, 1,1-	75-34-3	final	2.E-03	4.1	6.E-03	6.E+00	C	CA-OEHHA unit risk
Dichloroethane, 1,2-	107-06-2	final	1.E-04	4.0	4.E-04	4.E-01	C	IRIS unit risk
Dichloroethylene, 1,1-	75-35-4	final	5.E-03	4.0	2.E-02	2.E+01	NC	IRIS RfC/10
Dichloroethylene, trans-1,2-	156-60-5	interim	5.E-01	4.0	2.E+00	2.E+03	NC	ACGIH TLV
Dichloropropane, 1,2-	78-87-5	final	9.E-04	4.6	4.E-03	4.E+00	NC	IRIS RfC
Dichloropropene, 1,3-	542-75-6	final	6.E-04	4.5	3.E-03	3.E+00	C	IRIS unit risk
Dioxane, 1,4-	123-91-1	final	4.E-04	3.6	1.E-03	1.E+00	C	CA-OEHHA unit risk
Dioxins & Furans (as 2,3,7,8-TCDD)	NA	final	NA	NA	3.E-10	3.E-07	C	CA-OEHHA unit risk
Diphenylmethane diisocyanate (monomer & polymer)	101-68-8 and 9016-87-9	final	6.E-05	10.2	6.E-04	6.E-01	NC	IRIS RfC
Epichlorohydrin	106-89-8	final	3.E-04	3.8	1.E-03	1.E+00	NC	IRIS RfC
Epoxypropane, 1,2-	75-56-9	final	1.E-03	2.4	3.E-03	3.E+00	C	IRIS unit risk
Ethanol	64-17-5	interim	2.E+00	1.9	5.E+00	5.E+03	NC	ACGIH TLV
Ethanolamine	141-43-5	interim	7.E-03	2.5	2.E-02	2.E+01	NC	ACGIH TLV
Ethoxyethanol, 2-	110-80-5	final	5.E-02	3.7	2.E-01	2.E+02	NC	IRIS RfC
Ethyl acetate	141-78-6	interim	1.E+00	3.6	3.E+00	3.E+03	NC	ACGIH TLV
Ethyl benzene	100-41-4	final	9.E-04	4.3	4.E-03	4.E+00	C	CA-OEHHA unit risk
Ethylene oxide	75-21-8	final	6.E-05	1.8	1.E-04	1.E-01	C	CA-OEHHA unit risk
Fluorides (as F)	NA	final	NA	NA	1.E-02	1.E+01	NC	CA-OEHHA REL
Formaldehyde	50-00-0	final	6.E-04	1.2	8.E-04	8.E-01	C	IRIS unit risk
Formic acid	64-18-6	interim	1.E-02	1.9	2.E-02	2.E+01	NC	ACGIH TLV
Furfural	98-01-1	interim	5.E-03	3.9	2.E-02	2.E+01	NC	ACGIH TLV
Heptane (n-Heptane)	142-82-5	interim	1.E+00	4.1	4.E+00	4.E+03	NC	ACGIH TLV
Hexachlorobutadiene	87-68-3	final	4.E-05	10.7	5.E-04	5.E-01	C	IRIS unit risk
Hexane (n-Hexane)	110-54-3	final	2.E-01	3.5	7.E-01	7.E+02	NC	IRIS RfC
Hexanone, 2-	591-78-6	final	8.E-03	4.0	3.E-02	3.E+01	NC	IRIS RfC
Hydrazine	302-01-2	final	2.E-06	1.3	2.E-06	2.E-03	C	IRIS unit risk
Hydrogen chloride	7647-01-0	final	1.E-02	1.5	2.E-02	2.E+01	NC	IRIS RfC
Hydrogen cyanide	74-90-8	final	NA	NA	3.E-03	3.E+00	NC	IRIS RfC
Hydrogen sulfide	7783-06-4	final	1.E-03	1.4	2.E-03	2.E+00	NC	IRIS RfC

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Isopropanol	67-63-0	final	3.E+00	2.5	7.E+00	7.E+03	NC	CA-OEHHA REL
Manganese	7439-96-5	final	NA	NA	5.E-05	5.E-02	NC	IRIS RfC
Mercury (elemental)	7439-97-6	final	4.E-05	8.2	3.E-04	3.E-01	NC	IRIS RfC
Methanol	67-56-1	final	3.E+00	1.3	4.E+00	4.E+03	NC	CA-OEHHA REL
Methoxyethanol	109-86-4	final	6.E-03	3.1	2.E-02	2.E+01	NC	IRIS RfC
Methyl bromide (bromomethane)	74-83-9	final	1.E-03	3.9	5.E-03	5.E+00	NC	IRIS RfC
Methyl chloride	74-87-3	final	4.E-02	2.1	9.E-02	9.E+01	NC	IRIS RfC
Methyl ethyl ketone	78-93-3	final	2.E+00	2.9	5.E+00	5.E+03	NC	IRIS RfC
Methyl isobutyl ketone	108-10-1	final	7.E-01	4.1	3.E+00	3.E+03	NC	IRIS RfC
Methyl mercaptan	74-93-1	interim	1.E-03	2.0	2.E-03	2.E+00	NC	ACGIH TLV
Methyl methacrylate	80-62-6	final	2.E-01	4.1	7.E-01	7.E+02	NC	IRIS RfC
Methylene chloride	75-09-2	final	6.E-03	3.5	2.E-02	2.E+01	C	IRIS unit risk
Methyl-t-butyl ether (MTBE)	1634-04-4	final	1.E-02	3.6	4.E-02	4.E+01	C	CA-OEHHA unit risk
Naphthalene	91-20-3	final	6.E-05	5.2	3.E-04	3.E-01	C	CA-OEHHA unit risk
Nickel (insoluble refinery dust)	NA	final	NA	NA	4.E-05	4.E-02	C	IRIS unit risk
Nickel and compounds (as Ni)	7440-02-0	final	NA	NA	4.E-05	4.E-02	C	CA-OEHHA unit risk
Nickel oxide	1313-99-1	final	NA	NA	1.E-04	1.E-01	NC	CA-OEHHA REL
Nickel subsulfide	12035-72-2	final	NA	NA	2.E-05	2.E-02	C	IRIS unit risk
Nitric acid	7697-37-2	interim	5.E-03	2.6	1.E-02	1.E+01	NC	ACGIH TLV
Oxalic acid	144-62-7	interim	6.E-04	3.7	2.E-03	2.E+00	NC	ACGIH TLV
Phenol	108-95-2	final	5.E-02	3.8	2.E-01	2.E+02	NC	CA-OEHHA REL
Propylene	115-07-1	final	2.E+00	1.7	3.E+00	3.E+03	NC	CA OEHHA REL
Selenium (and compounds other than hydrogen selenide)	7782-49-2	final	NA	NA	2.E-02	2.E+01	NC	CA OEHHA REL
Styrene	100-42-5	final	2.E-01	4.3	1.E+00	1.E+03	NC	IRIS RfC
Sulfuric acid	7664-93-9	final	2.E-04	4.0	1.E-03	1.E+00	NC	CA OEHHA REL
Tetrachloroethane, 1,1,2,2-	79-34-5	final	3.E-05	6.9	2.E-04	2.E-01	C	IRIS unit risk
Tetrachloroethylene	127-18-4	final	2.E-04	6.8	2.E-03	2.E+00	C	CA-OEHHA unit risk
Tetrahydrofuran	109-99-9	interim	1.E-01	2.9	4.E-01	4.E+02	NC	ACGIH TLV
Titanium dioxide	13463-67-1	interim	NA	NA	2.E-02	2.E+01	NC	ACGIH TLV
Titanium tetrachloride	7550-45-0	final	NA	NA	1.E-04	1.E-01	NC	ATSDR MRL
Toluene	108-88-3	final	1.E+00	3.8	5.E+00	5.E+03	NC	IRIS RfC
Trichlorobenzene, 1,2,4-	120-82-1	interim	1.E-02	7.4	9.E-02	9.E+01	NC	ACGIH TLV
Trichloroethane, 1,1,1-	71-55-6	final	9.E-01	5.5	5.E+00	5.E+03	NC	IRIS RfC
Trichloroethane, 1,1,2-	79-00-5	final	1.E-04	5.6	6.E-04	6.E-01	C	IRIS unit risk
Trichloroethylene	79-01-6	final	9.E-04	5.4	5.E-03	5.E+00	C	CA-OEHHA unit risk
Trichlorofluoromethane	75-69-4	interim	2.E+00	5.6	1.E+01	1.E+04	NC	ACGIH TLV
Trichlorotrifluoroethane	76-13-1	interim	2.E+00	7.7	2.E+01	2.E+04	NC	ACGIH TLV
Trimethylbenzene (1,2,4- and 1,3,5-)	95-63-6, 108-67-8	interim	6.E-02	4.9	3.E-01	3.E+02	NC	ACGIH TLV
Turpentine	8006-64-2	interim	5.E-02	5.6	3.E-01	3.E+02	NC	ACGIH TLV
Vanadium	7440-62-2	interim	NA	NA	1.E-04	1.E-01	NC	ACGIH TLV

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Vinyl acetate	108-05-4	final	6.E-03	3.5	2.E-02	2.E+01	NC	IRIS RfC/10
Vinyl bromide	593-60-2	final	7.E-05	4.4	3.E-04	3.E-01	NC	IRIS RfC/10
Vinyl chloride	75-01-4	final	4.E-04	2.6	1.E-03	1.E+00	C	IRIS unit risk
Xylenes	1330-20-7	final	2.E-02	4.3	1.E-01	1.E+02	NC	IRIS RfC
Zinc chloride fume	7646-85-7	interim	NA	NA	2.E-03	2.E+00	NC	ACGIH TLV
Zinc oxide dust	1314-13-2	interim	NA	NA	5.E-03	5.E+00	NC	ACGIH TLV
Key to Abbreviations:								
AAG = Ambient Air Guideline								
ACGIH TLV = American Conference of Governmental Industrial Hygienists Threshold Limit Value - Time Weighted Average								
ATSDR MRL = Agency for Toxic Substance and Disease Registry Minimal Risk Level								
C = Carcinogenic Effects								
CA-OEHHA REL = California Office of Environmental Health Hazard Assessment Reference Exposure Level								
CA-OEHHA Unit Risk = California Office of Environmental Health Hazard Assessment Unit Risk								
CASRN = Chemical Abstracts System Registration Number								
IRIS RfC = USEPA Integrated Risk Information System Reference Concentration								
IRIS Unit Risk = USEPA Integrated Risk Information System Unit Risk								
NA = Not available								
NC = Noncarcinogenic Effects								