

DRAFT List of Risk Based Concentrations from Authoritative Bodies (Version 1)

This draft spreadsheet contains a list of readily available health-protective risk-based concentrations from recognized authoritative bodies, including U.S. EPA's Integrated Risk Information System (IRIS), California's Office of Health Hazard Assessment (OEHHA) cancer and non-cancer values, and the Agency for Toxic Substances and Disease Registry's (ATSDR's) Minimal Risk Levels, which are based on non-cancer effects. Also included are the current list of Oregon's 52 Ambient Benchmark Concentrations, along with changes recommended by the Air Toxics Science Advisory Committee for a portion of the benchmarks. In addition, the EPA list of 187 Hazardous Air Pollutants is highlighted.

This spreadsheet will be updated, and is a preliminary version requested by the Cleaner Air Oregon Advisory Committee for discussion purposes. DEQ and OHA will be adding EPA provisional peer reviewed toxicity values as another type of risk based concentration. DEQ and OHA are currently working on cases where authoritative bodies have grouped similar chemicals differently from one another, and more research is needed on which RBCs apply to which chemical groupings.

CAS	Common Name	Oregon DEQ 2010 ABCs (µg/m3)	DRAFT ATSDR 2015 OR DEQ ABCs	EPA 187 List	ATSDR MRLs															GEHHA										IRIS									
					Inhalation					Oral (No inhalation available)					Acute					Noncancer effects					Cancer risk					IRIS									
					Chronic (µg/m3)	Tox Profile Date	Intermediate (µg/m3)	Tox Profile Date	Acute (µg/m3)	Tox Profile Date	Chronic (mg/kg/day)	Tox Profile Date	Intermediate (mg/kg/day)	Tox Profile Date	Acute (mg/kg/day)	Tox Profile Date	Acute Inhalation (µg/m3)	Date Value Reviewed	8-hr Inhalation (µg/m3)	Date Value Reviewed	Chronic Inhalation (µg/m3)	Date Value Reviewed	Chronic Oral (mg/kg-d)	Date Value Reviewed	Inhalation Unit Risk (µg/m3) ⁻¹	Date Value Reviewed	Oral Slope Factor (mg/kg-d)	Date Value Reviewed	EPA - RfC (µg/m3)	EPA IRIS Date (NC)	Inhalation Unit Risk - IRIS (µg/m3) ⁻¹	EPA IRIS Date (Cancer)	EPA Oral - RfD (within no RfC values mg/kg-d)	EPA IRIS Date (NC)	Oral Slope Factor (when no IRIS value - units mg/kg/day) ⁻¹	EPA IRIS Date (Cancer)			
1	75070	Acetaldehyde	4.50E-01		Yes										4.70E+02	Dec-08	3.00E+02	Dec-08	1.40E+03	Dec-08			2.70E-06	Apr-99			9.00E+00	Oct-91	2.20E-06	Jun-88									
2	60355	Acetamide			Yes																	2.00E-05	Apr-99																
3	79558	Acetonitrile			Yes																					6.00E+01	Mar-99												
4	98682	Acetophenone			Yes																																		
5	107028	Acetone	2.00E-02	3.50E-01	Yes			9.20E-02	Aug-07	6.90E+00	Aug-07				2.50E+00	Dec-08	7.00E-01	Dec-08	3.50E-01	Dec-08							2.00E-02	Jun-03					1.00E-01	Aug-88					
6	79061	Acrylamide			Yes					1.00E-03	Dec-12	1.00E-03	Dec-12	1.00E-02	Dec-12							1.30E-03	Apr-99			6.00E+00	Mar-10	1.00E-04	Mar-10										
7	79107	Acrylic acid			Yes										6.00E+03	Apr-99									1.00E+00	Apr-94													
8	57131	Acrylonitrile	1.00E-02		Yes			2.20E+02	Dec-90	4.00E-02	Dec-90	1.00E-02	Dec-90				5.00E+00	Dec-01							2.90E-04	Apr-99			2.00E+00	Nov-91	6.80E-05	Sep-87							
9	50760	Actinomycin D																																					
10	159645	Alar																																					
11	309032	Albin								3.00E-05	Sep-02			2.00E-03	Sep-02																		1.50E-01	Jun-88					
12	107051	Allyl chloride			Yes																							4.90E-03	Sep-87			3.00E-05	Mar-87						
13	7429905	Aluminum								1.00E+00	Sep-08	1.00E+00	Sep-08													6.00E-06	Apr-99			1.00E+00	Dec-91								
14	1344281	Aluminum oxide (fibrous forms)																																					
15	30159117	2,4-Diaminobenzoic Sulfate																																					
16	87563	ortho-Aminooctanoic acid																																					
17	101804	4,4'-Diaminodiphenyl Ether																																					
18	6109973	3-Amino-2-ethylthiazole hydrochloride																																					
19	6828837	2-Amino-3-methyl-5H-pyrido[2,3-b]indole																																					
20	83280	1-Amino-2-methylanthraquinone																																					
21	7618096	2-Amino-3-methylimidazo[4,5-f]quinoline																																					
22	712885	2-Amino-5-(5-Nitro-2-Furyl)-1,3,4-Thiadiazol																																					
23	26148658	N-alpha-(2-amino-9H-pyridin[2,3-b]indol-5-yl)acetamide																																					
24	92871	4-Aminobiphenyl (POM)			Yes																																		
25	61625	Antimony																																					
26	7664417	Ammonia	2.00E+02	Retain				7.00E+01	Oct-04			1.20E+03	Oct-04				3.20E+03	Apr-99			2.00E+02	Feb-00					1.00E+02	May-91											
27	7802636	Ammonium bisulfate																																					
28	6848452	Ammonium nitrate																																					
29	7763202	Ammonium sulfate																																					
30	62533	Aniline			Yes																						1.60E-06	Apr-99			1.00E+00	Nov-90				5.70E-03	Sep-88		
31	90040	o-Anisidine			Yes																																		
32	134287	o-Anisidine Hydrochloride																																					
33	7440360	Antimony			Yes																														4.00E-04	Jan-87			
34		Antimony compounds including but not limited to:			Yes																																		
35	1309644	Antimony trioxide			Yes																																		
36	140278	Aramid																																					
37	7440362	Arsenic	2.00E-04		Yes					3.00E-04	Aug-07			5.00E-03	Aug-07	2.00E-01	Dec-08	1.50E-02	Dec-08	1.50E-02	Dec-08	3.50E-06	Dec-08			3.80E-03	Jul-90	1.50E+00	Oct-00			7.10E-06	Jun-91	4.90E-03	Jun-96	3.00E-04	Sep-91		
38		Arsenic compounds (inorganic) including but not limited to:			Yes																																		
39	7784421	Arsine			Yes																																		
40		Arsenic compounds (other than inorganic)			Yes																																		
41	482908	Azaxamine																																					
42	115026	Azaserine																																					
43	446866	Azathioprine																																					
44	52244	Tri-(1-hydroxyethyl)phosphine sulfide																																					
45	103333	Azobenzene																																					
46	7440393	Barium								2.00E-01	Aug-07	2.00E-01	Aug-07																										
47		Barium Compounds																																					
48		Benz[a]anthracene (PAH, POM), (see PAH)																																					
49	71432	Benzone	1.30E-01		Yes			9.60E+00	Aug-07	1.90E+01	Aug-07	2.90E+01	Aug-07				2.70E+01	Jun-14	3.00E+00	Jun-14	3.00E+00	Jun-14			2.90E-05	Jan-85	3.00E+01	Apr-03	3.80E-06	Jan-00									
50	92875	Benzidine (and its salts) (POM)			Yes																																		
51		Benzidine-based dyes (POM) including but not limited to:																																					
52	1937377	Direct Black 38 (PAH Derivative, POM)																																					
53	2602462	Direct Blue 6 (PAH Derivative, POM)																																					
54	1607166	Direct Brown 86 (technical grade) (POM)																																					
55		Benz[a]pyrene (PAH, POM), (see PAH)																																					
56		Benz[b]fluoranthene (PAH, POM), (see PAH)																																					
57	271896	Benzofuran																																					
58	88077	Benzoc trichloride (Benzotrachloride)			Yes																																		

