



BOTTLED WATER AND VENDED WATER

SOURCE AND PRODUCT WATER ANALYSIS



PHYSICAL

GROUP I: PHYSICAL	MAXIMUM
Color	15 units*
Odor	Threshold odor number 3*
Turbidity	5 units
Total Dissolved Solids (TDS)	500.0 mg/L*

**mineral water is exempt from allowable limit.*

CHEMICAL

GROUP II: CHEMICAL SUBSTANCE 1	MAXIMUM (mg/L)
Aluminum	0.2
Antimony	0.006
Arsenic	0.010
Barium	2
Beryllium	0.004
Cadmium	0.005
Chloride	250
Chromium	0.1
Copper	1.0
Cyanide	0.2
Fluoride	see 21 CFR 165.110(b)(4)(ii)
Iron	0.3
Lead	0.005
Manganese	0.05
Mercury	0.002
Nickel	0.1
Nitrate	10 (as nitrogen)
Nitrite	1 (as nitrogen)
Total Nitrate & Nitrite	10 (as nitrogen)
Phenols	0.001
Selenium	0.05
Silver	0.1
Sulfate	250.0
Thallium	0.002
Zinc	5.0

CHEMICAL, CONTINUED

GROUP III: CHEMICAL SUBSTANCE 2 (Volatile Organic Chemicals)	MAXIMUM (mg/L)
Benzene (71-43-2)	0.005
Carbon Tetrachloride (56-23-5)	0.005
o-Dichlorobenzene (95-50-1)	0.6
p-Dichlorobenzene (106-46-7)	0.075
1,2-Dichloroethane (107-06-2)	0.005
1,1-Dichloroethylene (75-35-4)	0.007
cis-1,2-Dichloroethylene(156-59-2)	0.07
trans-1,2-Dichloroethylene (156-60-5)	0.1
Dichloromethane (75-09-2)	0.005
1,2-Dichloropropane (78-87-5)	0.005
Ethylbenzene (100-41-4)	0.7
Monochlorobenzene (108-90-7)	0.1
Styrene (100-42-5)	0.1
Tetrachloroethylene (127-18-4)	0.005
Toluene (108-88-3)	1
1,2,4-Trichlorobenzene (120-82-1)	0.07
1,1,1-Trichloroethane (71-55-6)	0.20
1,1,2-Trichloroethane (79-00-5)	0.005
Trichloroethylene (79-01-6)	0.005
Vinyl chloride (75-01-4)	0.002
Xylenes (330-20-7)	10
Total Trihalomethanes (TTHMs) ^a	0.01

GROUP IV: CHEMICAL SUBSTANCE 3 (Non-Volatile Synthetic Organic Chemicals)	MAXIMUM (mg/L)
Alachlor (15972-60-8)	0.002
Atrazine (1912-24-9)	0.003
Benzo(a)pyrene (50-32-8)	0.0002
Carbofuran (1563-66-2)	0.04
Chlordane (57-74-9)	0.002
Dalapon (75-99-0)	0.2
1,2-Dibromo-3-chloropropane (DBCP) (96-12-8)	0.0002
2, 4-D (94-75-7)	0.07
Di(2-ethylhexyl)adipate (103-23-1)	0.4
Di(2-ethylhexyl)phthalate (117-81-7)	0.006
Dinoseb (88-85-7)	0.007
Diquat (85-00-7)	0.02
Endothall (145-73-3)	0.1
Endrin (72-20-8)	0.002
Ethylene Dibromide (EDB)(106-93-4)	0.00005
Glyphosate (1071-53-6)	0.7
Heptachlor (76-44-8)	0.0004
Heptachlor Epoxide (1024-57-3)	0.0002
Hexachlorobenzene (118-74-4)	0.001
Hexachlorocyclopentadiene (77-47-4)	0.05
Lindane (58-89-9)	0.0002
Methoxychlor (72-43-5)	0.04
Oxamyl (23135-22-0)	0.2
Pentachlorophenol (87-86-5)	0.001
PCB's (as decachlorobiphenyls)(1336-36-3)	0.0005
Picloram (1918-02-1)	0.5
Simazine (122-34-9)	0.004
2,3,7,8-TCDD (Dioxin)(1746-01-6)	3 x 10 ⁻⁸
Toxaphene (8001-35-2)	0.003
2, 4, 5-TP (Silvex)(93-72-1)	0.05

RADIOLOGICAL

GROUP V: RADIOACTIVITY	MAXIMUM
Combined Radium-226 and Radium-228 ^b	5 pCi/L
Gross Alpha particle activity (including Radium-226, but excluding Radon and Uranium)	15 pCi/L
Gross Beta particle activity	50 pCi/L
Uranium ^c	30 µg/L

BACTERIOLOGICAL

GROUP VI: BACTERIOLOGICAL, TOTAL COLIFORMS	MAXIMUM (Coliform organisms)**
Multiple Tube Fermentation Method	2.2 MPN /100 mL
Membrane Filter Method	4.0 /100 mL

*** see 21 CFR 165.110(b)(2)(i) for more details*

DISINFECTANTS AND DISINFECTION BYPRODUCTS^d

GROUP VII: Disinfection byproducts (DBPs)	MAXIMUM (mg/L)
Bromate	0.010
Chlorite	1.0
Haloacetic acids (five)(HAA5)	0.060

GROUP VII: Residual disinfectants	MAXIMUM (mg/L)
Chloramine (as Cl ₂)	4.0
Chlorine (as Cl ₂)	4.0
Chlorine dioxide (as ClO ₂)	0.8

ANALYSES REQUIREMENTS AND TESTING FREQUENCIES

All testing must be done by laboratories certified by the California Environmental Laboratory Accreditation Program (ELAP) or the United States Environmental Protection Agency (USEPA). Analyses must be conducted in accordance with 21CFR 165.110(b) and using the methods specified in applicable sections of "Standard Methods for the Examination of Water and Wastewater," published by the American Public Health Association.

GROUP	TYPE OF ANALYSIS	FREQUENCY OF TESTING
Group I	Physical	Annually
Group II	Chemical	Annually
Group III	Volatile Organic Chemicals	Annually
Group IV	Non-Volatile Synthetic Organic Chemicals	Annually
Group VII	Residual disinfectants & DBPs	Annually
Group V	Radioactivity	Source Water- Every 4 years Bottled Water- Every Year
Group VI	Bacteriological	Vended Water- Every 6 months Bottled Water- Weekly

NOTES:

^a Total Trihalomethanes (TTHM) is the sum of trichloromethane (chloroform), dibromochloromethane (chlorodibromomethane), bromodichloromethane (dichlorobromomethane), and tribromomethane (bromoform). TTHM shall not exceed 0.01mg/L (10 ppb) pursuant to H&SC 111080(b).

^b If Gross Alpha particle activity is less than 5pCi/L you may determine only Radium-228 instead of combined Radium-226 and Radium-228.

^c If Gross Alpha particle activity is less than 15pCi/L, Uranium does not have to be determined.

^d Firms that do not use a public water system as the source of their water and whose source water has not been treated with a chlorine-based disinfectant or ozone, do not have to test their source water for residual disinfectants and DBPs. Firms that do not use a public water system as the source of their water but whose source water has been treated with a chlorine-based disinfectant or ozone, must test their source water for the residual disinfectants and DBPs in accordance with 21CFR 129.35(a)(4)(iii) and 66 FR 16865, Mar. 28, 2001. There are no exemptions from this testing requirement for product (bottled) water.

REFERENCES:

Code of Federal Regulations, Title 21, sections 129.1 to 129.80, and 165.110(b).

The California Health and Safety Code, sections 111070 to 111195.

The California Code of Regulations, Title 22, Sections 64421 to 64449.