

Drinking Water Quality Standards

Parameter	Units	Minimum Concentration	Maximum Concentration
Physical			
Temperature	°C	-	30
Taste and Odour	-	-	Unobjectionable
Total Dissolved Solids	mg/l	100	500
Turbidity	NTU	-	1
Alkalinity			
Calcium	mg/l	30	-
CO ₂ (free)	mg/l	-	Nil
Magnesium	mg/l	5.0	-
pH	pH unit	6.5	8.5
Total Alkalinity as CaCO ₃	mg/l	40	-
Total Hardness as CaCO ₃	mg/l	75	500
Inorganic			
Aluminium	mg/l	-	0.1
Ammonium as NH ₄ ⁺	mg/l	-	0.5
Antimony	mg/l	-	0.02
Arsenic	mg/l	-	0.01 (A,T)
Barium	mg/l	-	0.7
Boron	mg/l	-	2.4
Bromate	mg/l	-	0.01(A,T)
Cadmium	mg/l	-	0.003
Chlorate	mg/l	-	0.7(D)
Chloride	mg/l	-	250
Chlorite	mg/l	-	0.7(D)
Chlorine Residual (free)	mg/l	0.2	0.5
Chromium (total)	mg/l	-	0.05(P)
Copper	mg/l	-	2
Cyanide	mg/l	-	0.07
Dissolved Oxygen	mg/l	-	-
Fluoride	mg/l	-	1.5
Iron	mg/l	-	0.3
Lead	mg/l	-	0.01(A,T)
Manganese	mg/l	-	0.4(C)
Inorganic Mercury	mg/l	-	0.006
Molybdenum	mg/l	-	0.07
Nickel	mg/l	-	0.07
Nitrate as NO ₃	mg/l	-	50
Nitrite as NO ₂	mg/l	-	0.2
Potassium	mg/l	-	10
Selenium	mg/l	-	0.04(P)
Sodium	mg/l	-	30
Sulfate	mg/l	-	250
Sulfide	mg/l	-	0.002
Uranium	mg/l	-	0.03(P)
Zinc	mg/l	-	3.0
Organic			
Acrylamide	mg/l	-	0.0005
Alachlor	mg/l	-	0.02
Aldicarb	mg/l	-	0.01
Aldrin and Dieldrin	mg/l	-	0.00003
Atrazine and chloro-s-triazine metabolites	mg/l	-	0.1
Benzene	mg/l	-	0.01
Benzo-a-pyrene	mg/l	-	0.0007
Bromoform	mg/l	-	0.1
BDCM	mg/l	-	0.06
Carbofuran	mg/l	-	0.007
Carbon Tetrachloride	mg/l	-	0.004
Chloral Hydrate	mg/l	-	0.01
Chlordane	mg/l	-	0.0002
Chloroform	mg/l	-	0.3
Chlorotoluron	mg/l	-	0.03
Chlorpyrifos	mg/l	-	0.03
Cyanazine	mg/l	-	0.0006
Cyanogen Chloride	mg/l	-	0.07
2,4-Dichlorophenoxyacetic acid	mg/l	-	0.03
2,4-Dichlorophenoxybutyric acid	mg/l	-	0.09
DDT and metabolites	mg/l	-	0.001
Dibromoacetonitrile	mg/l	-	0.07
DBCM	mg/l	-	0.1
1,2-Dibromo-3-chloropropane	mg/l	-	0.001
1,2-Dibromoethane	mg/l	-	0.0004(P)
Dichloroacetate	mg/l	-	0.05(D)
Dichloro acetic acid	mg/l	-	0.05
Dichloroacetonitrile	mg/l	-	0.02(P)
1,2-Dichlorobenzene	mg/l	-	1(C)
1,4-Dichlorobenzene	mg/l	-	0.3(C)
1,2-Dichloroethane	mg/l	-	0.03
1,1-Dichloroethene	mg/l	-	0.03
1,2-Dichloroethene	mg/l	-	0.05
Di(2-ethylhexyl)adipate	mg/l	-	0.08
Di(2-ethylhexyl)phthalate	mg/l	-	0.008
Dichloromethane	mg/l	-	0.02
1,2-Dichloropropane	mg/l	-	0.04(P)
1,3-Dichloropropene	mg/l	-	0.02
Dichlorprop	mg/l	-	0.1
Dimethoate	mg/l	-	0.006
1,4-Dioxane	mg/l	-	0.05
Edetic acid(EDTA)	mg/l	-	0.6(free acid)
Endrin	mg/l	-	0.0006

Parameter	Units	Minimum Concentration	Maximum Concentration
Organic			
Epichlorohydrin	mg/l	-	0.0004(P)
Ethylbenzene	mg/l	-	0.3(C)
Fenoprop	mg/l	-	0.009
Formaldehyde	mg/l	-	0.9
Hexachlorobenzene	mg/l	-	0.0001
Hexachlorobutadiene	mg/l	-	0.0006
Hydroxyatrazine	mg/l	-	0.2
Isoproturon	mg/l	-	0.009
Lindane	mg/l	-	0.002
MCPA	mg/l	-	0.002
Mecoprop	mg/l	-	0.01
Methoxychlor	mg/l	-	0.02
Metalachlor	mg/l	-	0.01
Molinate	mg/l	-	0.006
Monochloroacetate	mg/l	-	0.02
Monochloramine	mg/l	-	3
Monochlorobenzene	mg/l	-	0.3
Microcystin L R (Total)	mg/l	-	0.001(P)
N-nitrosodimethylamine(NDMA)	mg/l	-	0.0001
Nitritotriacetic acid	mg/l	-	0.2
Pendimethalin	mg/l	-	0.02
Pentachlorophenol	mg/l	-	0.009(P)
Permethrin	mg/l	-	0.3
Phenol	mg/l	-	0.001
Simazine	mg/l	-	0.002
Sodium dichloroisocyanurate	mg/l	-	50 (40 as cyanuric acid)
Styrene	mg/l	-	0.02(C)
Surfactants MBAS	mg/l	-	0.2
2,4,5-Trichlorophenoxyacetic acid	mg/l	-	0.009
Terbutylazine	mg/l	-	0.007
Tetrachloroethene	mg/l	-	0.04
Toluene	mg/l	-	0.7(C)
Total THMs	mg/l	-	0.08
Trichloroacetate	mg/l	-	0.2
Trichloroethene	mg/l	-	0.02(P)
Trichloroacetic acid	mg/l	-	0.1
Total Trichlorobenzene	mg/l	-	0.02
1,1,1,-Trichloroethane	mg/l	-	2
2,4,6-Trichlorophenol	mg/l	-	0.2(C)
Trifluralin	mg/l	-	0.02
Vinyl Chloride	mg/l	-	0.003
Xylenes	mg/l	-	0.5(C)
Bacteriological			
Total Coliform	per 100 ml	0	0
E.Coli or thermotolerant Coliform bacteria	per 100 ml	-	0

P = Provisional guideline value

T= Based on provisional guideline value because calculated guideline value is below the level that can be achieved through practical treatment methods ,source protection, etc.

A = Based on provisional guideline value because calculated guideline value is below the achievable quantification level

D = Based on provisional guideline value because disinfection is likely to result in the guideline value being exceeded

C = Concentrations of the substance at or below the health based guideline value may affect the appearance,taste,odour of the water,leading to consumer complaints

www.rcjv.gov.sa