

Our Drinking Water Quality

The quality of our drinking water is regulated by the Environmental Public Health (Water Suitable for Drinking) (No.2) Regulations 2019. The drinking water standards set out under the EPH Regulations were based on the WHO Guidelines for Drinking-water Quality^{Note (1)}. PUB will make continuous effort to maintain drinking water quality at the highest possible level.

Singapore Drinking Water Quality (January 2024 - December 2024)

Source : PUB's Water Quality Department

Parameters	Unit	WHO Guideline Value	Environmental Public Health (Water Suitable for Drinking) (No.2) Regulations 2019	Average	Range	Meet Guideline / Regulation
Microbiological Parameter						
<i>Escherichia coli</i> (E. coli)	cfu/100mL	<1	<1	< 1	< 1	✓
Physical Parameters						
Colour	Hazen	-	≤ 15	< 5	< 5	✓
Conductivity	µS/cm	-	-	226	81 - 558	-
Odour	TON	-	-	Unobjectionable	Unobjectionable	-
pH Value	Units	-	6.5 - 9.5	8.0	7.5 - 8.8	✓
Total Dissolved Solids	mg/L	-	-	110	61 - 496	-
Turbidity	NTU	-	≤ 5	0.15	0.06 - 0.42	✓
Radiological Parameters						
Gross Alpha	Bq/L	≤ 0.5 ^{Note (2)}	≤ 0.5	0.06	< 0.05 - 0.11	✓
Gross Beta	Bq/L	≤ 1 ^{Note (2)}	≤ 1	0.084	< 0.05 - 0.205	✓
Radon-222	Bq/L	-	≤ 100	< 0.6	< 0.6	✓
Chemical Parameters						
Acrylamide	µg/L	≤ 0.5	≤ 0.5	< 0.2	< 0.2	✓
Alachlor	µg/L	≤ 20	≤ 20	< 1	< 1	✓
Aldicarb Sulfoxide and Aldicarb Sulfone	µg/L	≤ 10	≤ 10	< 0.05	< 0.05	✓
Aldrin and Dieldrin	µg/L	≤ 0.03	≤ 0.03	< 0.01	< 0.01	✓
Antimony	µg/L	≤ 20	≤ 20	1	< 1 - 5	✓
Arsenic	µg/L	≤ 10	≤ 10	0.52	< 0.50 - 1.05	✓
Atrazine and its chloro-s-triazine metabolites	µg/L	≤ 100	≤ 100	< 0.2	< 0.2	✓
Aluminium	mg/L	-	-	0.020	< 0.019 - 0.064	-

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Barium	mg/L	≤ 1.3	≤ 1.3	0.016	< 0.004 - 0.038	✓
Bentazone	µg/L	-	≤ 500	< 0.05	< 0.05	✓
Benzene	µg/L	≤ 10	≤ 10	< 1	< 1	✓
Benzo[a] pyrene	µg/L	≤ 0.7	≤ 0.7	< 0.07	< 0.07	✓
Boron	mg/L	≤ 2.4	≤ 2.4	0.314	< 0.004 - 0.669	✓
Bromate	mg/L	≤ 0.01	≤ 0.01	0.002	0.002 - 0.005	✓
Bromodichloromethane	µg/L	≤ 60	≤ 60	7.0	< 5 - 17.3	✓
Bromoform	µg/L	≤ 100	≤ 100	5.7	< 5 - 44.8	✓
Cadmium	µg/L	≤ 3	≤ 3	< 0.2	< 0.2	✓
Calcium	mg/L	-	-	17.1	3.2 - 75.8	-
Carbofuran	µg/L	≤ 7	≤ 7	< 0.05	< 0.05	✓
Carbon Tetrachloride	µg/L	≤ 4	≤ 4	< 0.4	< 0.4	✓
Chlorate	mg/L	≤ 0.7	≤ 0.7	0.133	< 0.043- 0.450	✓
Chlordane (total isomers)	µg/L	≤ 0.2	≤ 0.2	< 0.02	< 0.02	✓
Chloride	mg/L	-	-	28	< 5 - 150	-
Chlorine	mg/L	≤ 5	≤ 5	2.27	1.28 - 2.88	✓
Chlorite	mg/L	≤ 0.7	≤ 0.7	< 0.015	< 0.015	✓
Chloroform	µg/L	≤ 300	≤ 300	12.4	< 5 - 41.5	✓
Chlorotoluron	µg/L	≤ 30	≤ 30	< 0.05	< 0.05	✓
Chlorpyrifos	µg/L	≤ 30	≤ 30	< 0.1	< 0.1	✓
Chromium	mg/L	≤ 0.05	≤ 0.05	< 0.005	< 0.005	✓
Copper	mg/L	≤ 2	≤ 2	0.002	< 0.002 - 0.003	✓
Cyanazine	µg/L	≤ 0.6	≤ 0.6	< 0.2	< 0.2	✓
Cyanide	mg/L	-	≤ 0.07	< 0.002	< 0.002	✓
Cyanogen chloride (as cyanide)	µg/L	-	≤ 70	< 50	< 50	✓
Cylindrospermopsins (Total)	µg/L	≤ 0.7	-	< 0.1	< 0.1	✓
2,4-D (2,4-dichlorophenoxyacetic acid) in free acid form	µg/L	≤ 30	≤ 30	< 0.05	< 0.05	✓
2,4-DB [4-(2,4-Dichlorophenoxy)butyric acid]	µg/L	≤ 90	≤ 90	< 0.05	< 0.05	✓
DDT and metabolites	µg/L	≤ 1	≤ 1	< 0.01	< 0.01	✓
Di(2-Ethylhexyl) phthalate	µg/L	≤ 8	≤ 8	< 1	< 1	✓
1,2-Dibromo-3-Chloropropane (DBCP)	µg/L	≤ 1	≤ 1	< 0.1	< 0.1	✓
Dibromoacetonitrile	µg/L	≤ 70	≤ 70	< 7	< 7	✓
Dibromochloromethane	µg/L	≤ 100	≤ 100	5.3	< 5 - 13.0	✓
Dibromoethane, 1,2- (Ethylene Dibromide)	µg/L	≤ 0.4	≤ 0.4	< 0.05	< 0.05	✓
Dichloroacetate	µg/L	≤ 50	≤ 50	9.7	< 5 - 36.5	✓

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Dichloroacetonitrile	µg/L	≤ 20	≤ 20	1.53	< 1 - 4.44	✓
Dichlorobenzene, 1,2-	µg/L	≤ 1000	≤ 1000	< 1	< 1	✓
Dichlorobenzene, 1,4-	µg/L	≤ 300	≤ 300	< 1	< 1	✓
Dichloroethane, 1,2-	µg/L	≤ 30	≤ 30	< 2	< 2	✓
Dichloroethene (cis & trans), 1,2-	µg/L	≤ 50	≤ 50	< 5	< 5	✓
Dichloromethane	µg/L	≤ 20	≤ 20	< 3	< 3	✓
Dichloropropane, 1,2-	µg/L	≤ 40	≤ 40	< 1	< 1	✓
Dichloropropene, 1,3-	µg/L	≤ 20	≤ 20	< 2	< 2	✓
Dichlorvos	µg/L	-	≤ 20	< 0.02	< 0.02	✓
Dicofol	µg/L	-	≤ 10	< 0.01	< 0.01	✓
Dichlorprop	µg/L	≤ 100	≤ 100	< 0.05	< 0.05	✓
Dimethoate	µg/L	≤ 6	≤ 6	< 0.1	< 0.1	✓
Dioxane, 1,4-	µg/L	≤ 50	≤ 50	< 1	< 1	✓
Diquat	µg/L	-	≤ 30	< 2.5	< 2.5	✓
Endrin	µg/L	≤ 0.6	≤ 0.6	< 0.01	< 0.01	✓
Epichlorohydrin	µg/L	≤ 0.4	≤ 0.4	< 0.1	< 0.1	✓
Ethylbenzene	µg/L	≤ 300	≤ 300	< 1	< 1	✓
Edetic acid (EDTA-Ethylene Diamine Tetraacetic Acid) in free acid form	µg/L	≤ 600	≤ 600	< 1	< 1	✓
Fenoprop (2,4,5-TP; 2,4,5-trichlorophenoxy propionic acid)	µg/L	≤ 9	≤ 9	< 0.05	< 0.05	✓
Fluoride	mg/L	≤ 1.5	≤ 0.7	0.45	0.21 - 0.56	✓
Glyphosate and Aminomethylphosphonic acid (AMPA)	µg/L	-	≤ 900	< 5	< 5	✓
Hexachlorobutadiene	µg/L	≤ 0.6	≤ 0.6	< 0.01	< 0.01	✓
Hydroxyatrazine	µg/L	≤ 200	≤ 200	< 0.5	< 0.5	✓
Isoproturon	µg/L	≤ 9	≤ 9	< 0.05	< 0.05	✓
Iron	mg/L	-	-	0.004	< 0.003 - 0.023	-
Lead	µg/L	≤ 10	≤ 10	< 0.5	< 0.5	✓
Lindane	µg/L	≤ 2	≤ 2	< 0.01	< 0.01	✓
Malathion	µg/L	-	≤ 900	< 0.02	< 0.02	✓
MCPA (4-Chloro-2-methylphenoxyacetic acid)	µg/L	-	≤ 700	< 0.05	< 0.05	✓
Mecoprop [MCPP; 2-(2-methyl-chlorophenoxy) propionic acid]	µg/L	≤ 10	≤ 10	< 0.05	< 0.05	✓
Mercury, in inorganic form	µg/L	≤ 6	≤ 6	< 0.03	< 0.03	✓
Methoxychlor	µg/L	≤ 20	≤ 20	< 0.01	< 0.01	✓
Metolachlor	µg/L	≤ 10	≤ 10	< 1	< 1	✓
Microcystin-LR	µg/L	-	≤ 1	< 0.1	< 0.1	✓
Microcystins (Total)	µg/L	≤ 1	-	< 0.5	< 0.5	✓

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Molinate	µg/L	≤ 6	≤ 6	< 0.6	< 0.6	✓
Monochloramine	mg/L	≤ 3	≤ 3	2.06	1.26 - 2.68	✓
Monochloroacetic acid (chloroacetic acid)	µg/L	≤ 20	≤ 20	< 10	< 10	✓
Manganese	mg/L	≤ 0.08	≤ 0.4	0.002	< 0.002 - 0.019	✓
Magnesium	mg/L	-	-	0.267	< 0.027 - 3.0	-
Molybdenum	mg/L	-	≤ 0.07	< 0.004	< 0.004	✓
Nickel	mg/L	≤ 0.07	≤ 0.07	0.003	< 0.003 - 0.024	✓
Nitrate (as N)	mg/L	≤ 11	≤ 11	0.13	< 0.01 - 0.88	✓
Nitritotriacetic acid (NTA)	µg/L	≤ 200	≤ 200	< 1	< 1	✓
Nitrite (as N)	mg/L	≤ 0.9	≤ 0.9	0.01	< 0.01 - 0.06	✓
Nitrate plus nitrite combined	units	≤ 1	≤ 1	0.02	< 0.01 - 0.08	✓
N-Nitrosodimethylamine (NDMA)	ng/L	≤ 100	≤ 100	2.0	< 2 - 2.1	✓
Pendimethalin	µg/L	≤ 20	≤ 20	< 1	< 1	✓
Pentachlorophenol	µg/L	≤ 9	≤ 9	< 0.5	< 0.5	✓
Perchlorate	µg/L	≤ 70	≤ 70	< 2	< 2	✓
Permethrin, where used as a larvicide for public health purposes	µg/L	-	≤ 300	< 2	< 2	✓
Pyriproxyfen	µg/L	-	≤ 300	< 0.05	< 0.05	✓
Saxitoxins (Total)	µg/L	≤ 3	-	< 0.1	< 0.1	✓
Selenium	µg/L	≤ 40	≤ 40	< 0.5	< 0.5	✓
Simazine	µg/L	≤ 2	≤ 2	< 0.2	< 0.2	✓
Styrene	µg/L	≤ 20	≤ 20	< 2	< 2	✓
Sulphate	mg/L	-	-	7.6	1.4 - 74.2	-
Silica (as SiO ₂)	mg/L	-	-	1.16	0.18 - 6.92	-
Sodium	mg/L	-	-	9.7	1.4 - 32.2	-
Terbutylazine (TBA)	µg/L	≤ 7	≤ 7	< 0.7	< 0.7	✓
Tetrachloroethene	µg/L	≤ 100	≤ 40	< 1	< 1	✓
Toluene	µg/L	≤ 700	≤ 700	< 5	< 5	✓
Trichloroethene	µg/L	≤ 8	≤ 20	< 1	< 1	✓
Trichlorophenol, 2,4,6-	µg/L	≤ 200	≤ 200	< 1	< 1	✓
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	µg/L	≤ 9	≤ 9	< 0.05	< 0.05	✓
Trichloroacetate	µg/L	≤ 200	≤ 200	6.5	< 5 - 20.8	✓
Trifluralin	µg/L	≤ 20	≤ 20	< 1	< 1	✓
Total Trihalomethanes Ratio	units	≤ 1	≤ 1	0.166	< 0.017 - 0.481	✓
Total Organic Carbon (TOC)	mg/L	-	-	0.90	< 0.06 - 1.91	-
Total Alkalinity (as CaCO ₃)	mg/L	-	-	34	7 - 66	-

Parameters	Unit	WHO Guideline Value	Environmental Public Health (Water Suitable for Drinking) (No.2) Regulations 2019	Average	Range	Meet Guideline / Regulation
Total Hardness (as CaCO ₃)	mg/L	-	-	44	8 - 192	-
Total Phosphorous (as P)	mg/L	-	-	0.025	< 0.003 - 0.084	-
Uranium	µg/L	≤ 30	≤ 30	0.007	< 0.001 - 0.020	✓
Vinyl Chloride	µg/L	≤ 0.3	≤ 0.3	< 0.1	< 0.1	✓
Xylenes	µg/L	≤ 500	≤ 500	< 15	< 15	✓

The table above provides the data of drinking water quality produced by the Waterworks and Desalination Plants.

Note (1) WHO Guideline Values listed in this report are obtained from WHO Guidelines for Drinking-Water Quality (2022) 4th Edition, Incorporating 1st and 2nd Addenda.

Note (2) These are WHO screening values and not guideline values.