

The quality of Turku distribution water according to the control research programme in 2023



		Unit	n	Highest	Lowest	Average	Median	Quality recommendation/ requirements 683/2017 (C)
Temperature		°C	138	17,2	4,2	10	9,6	<20 °C
pH			139	8,6	8,3	8,5	8,5	6,5 - 9,5 (A)
Conductivity		µS/cm	139	150	140	140	140	<2500 (B)
Colour		mg Pt/l	139	2	1	1,2	1	"No abnormal changes" (B)
Turbidity		FNU	139	0,3	0,1	0,1	0,1	"No abnormal changes" (B)
Odour			139	Mild chlorine	Odorless	Odorless	Odorless	"No abnormal changes" (B)
Flavour			139	Mild chlorine	Flavourless	Flavourless	Flavourless	"No abnormal changes" (B)
Microbiological quality:								
Total Coliforms		CFU/100 ml	139	0	0	0	0	0 (B)
<i>Echerichia coli</i>		CFU/100 ml	139	0	0	0	0	0 (A)
Enterococci		CFU/100 ml	139	2	0	0	0	0 (A)
<i>Clostridium perfringens</i>		CFU/100 ml	7	0	0	0	0	0 (B)
Heterotrophic plate count (22 °C)		CFU/ml	140	18	0	1	0	"No abnormal changes" (B)
Nitrogen compounds:								
Ammonium	NH ₄ ⁺	mg/l	139	0,09	<0,003	0,03	0,04	<0,5 (B)
Nitrate, Saramäki	NO ₃ ⁻	mg/l	4	2,3	1,9	2,1	2,1	<50 (A)
Nitrite	NO ₂ ⁻	mg/l	139	0,012	<0,002	0,003	0,002	<0,50 (A)
Anions:								
Bromate	BrO ₃ ⁻	µg/l	12	3,3	<3	<3	<3	
Fluoride	F ⁻	mg/l	8	0,09	0,05	0,07	0,07	<1,5 (A)
Chloride, Saramäki	Cl ⁻	mg/l	4	12	11	11,5	11,5	<250 (A)
Sulphate, Halinen	SO ₄ ²⁻	mg/l	5	11	9,2	9,8	9,5	<250 (B)
Metals and semimetals:								
Aluminium	Al	µg/l	139	190	6	16	15	<200 (A)
Arsenic, Halinen	As	µg/l	5	1,9	1,6	1,7	1,7	<10 (A)
Mercury, Halinen	Hg	µg/l	5	<0,01	<0,01	<0,01	<0,01	<1 (A)
Cadmium	Cd	µg/l	8	<0,01	<0,01	<0,01	<0,01	<5 (A)
Chromium	Cr	µg/l	8	0,15	0,11	0,13	0,13	<50 (A)
Copper	Cu	mg/l	8	0,12	0,004	0,04	0,010	<2 (A)
Lead	Pb	µg/l	8	0,29	<0,05	0,07	0,07	<10 (A)
Manganese	Mn	µg/l	139	4	<1	1,2	1	<50 (B)
Sodium, Halinen	Na	mg/l	5	4,9	4,4	4,7	4,7	<200 (A)
Nickel	Ni	µg/l	8	3,6	<0,3	1,2	0,7	<20 (A)
Iron	Fe	µg/l	139	56	<2	12,1	10	<200 (B)
TOC (Total organic carbon)		mg/l	8	2,2	1,6	1,8	1,8	"No abnormal changes" (B)
Volatile organic compounds:								
Benzene, Halinen		µg/l	5	<0,3	<0,3	<0,3	<0,3	<1 (A)
Chloroform, Halinen		µg/l	5	17	12	14,4	14	
Bromodichloromethane, Halinen		µg/l	5	2,5	0,9	1,9	2,1	
Trihalomethane (Total)	THM	µg/l	8	19,6	12	15	14	<100 (A)
1,2 -dichloroethane, Halinen		µg/l	5	<0,5	<0,5	<0,5	<0,5	<3 (A)
Tetra- and Trichloroethylene (Total), Halinen		µg/l	5	<1	<1	<1	<1	<10 (A)
Pesticides:								
Dalapon****, Halinen		µg/l	5	0,22	0	0,12	0,11	Total <0,10 (A)
Chlorine:								
Chlorine (Total, from distribution system)	Cl ₂	mg/l	184	0,58	0,02	0,3	0,4	
Chlorine (Free, from distribution system)	Cl ₂	mg/l	184	0,13	0	0,04	0,04	

****In this case, Dalaponi is a by-product of the disinfection process

A = Quality requirement

B = Quality recommendation

C = Decree of the Ministry of Social Affairs and Health Relating to the Quality and Monitoring of Water Intended for Human Consumption