

Average water quality at water treatment plants and distribution network in City of Tampere (Finland) 1.1.2023-31.12.2023

| | Unit | Method | Kaupinoja wtp | Rusko wtp | Messukylä wtp | Mustalampi wtp | Hyhky wtp | Pinsiö wtp | Julkujärvi wtp | Distribution Network | Quality recommendation/requirement * |
|-----------------------------------|------------|------------------------------|---------------|-----------|---------------|----------------|-----------|------------|----------------|----------------------|--------------------------------------|
| Microbiological parameters | | | | | | | | | | | |
| Coliform bacteria (inc. e.coli) | pm/y/100ml | SFS 3016 / SFS_EN ISO 9308-2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 |
| Heterotrophic plate count 22°C | pm/y/ml | SFS-EN ISO 6222 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ** |
| Heterotrophic plate count 37°C | pm/y/ml | SFS-EN ISO 6222 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Intestinal enterococci | pm/y/100ml | EN ISO 7899-2 | 0 | 0 | | | | | | 0 | 0 |
| Chemical and indicator parameters | | | | | | | | | | | |
| Temperature | °C | Internal method | 6.9 | 8.4 | 7.4 | 8.3 | 7.7 | 6.0 | 6.6 | 8.5 | |
| pH | | SFS 3021 | 7.8 | 8.0 | 7.9 | 7.9 | 7.8 | 7.7 | 7.9 | 8 | ≥ 6,5 and ≤ 9,5 |
| Turbidity | NTU | ISO 7027 | 0.11 | 0.08 | 0.07 | 0.07 | 0.06 | 0.06 | 0.12 | 0.16 | *** |
| Alkalinity | mmol/l | SFS 3005 | 0.71 | 0.69 | 1.3 | 0.79 | 1.1 | 0.81 | 0.92 | | |
| Total organic carbon | mg/l | SFS-EN 1484 | 2.1 | 1.8 | 0.87 | 0.85 | 0.68 | 0.65 | 0.64 | 1.5 | ** |
| Iron, Fe | mg/l | SFS 3028 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | 0.05 | 0.04 | 0.2 |
| Manganese, Mn | mg/l | SFS 3033 | <0.01 | <0.01 | 0.02 | <0.01 | <0.01 | <0.01 | 0.01 | 0.01 | 0.05 |
| Conductivity 25 °C | mS/m | SFS 3003 | 17.2 | 15 | 33 | 31 | 27 | 15 | 15 | 20 | 250 |
| Colour | mgPt/l | SFS-EN ISO 7887 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | *** |
| Free chlorine | mg/l | SFS-EN ISO 7393-2 | 0.37 | 0.36 | 0.17 | 0.21 | 0.16 | 0.15 | 0.13 | 0.1 | |
| Total chlorine, Cl2 | mg/l | SFS-EN ISO 7393-2 | 0.45 | 0.43 | 0.22 | 0.24 | 0.19 | 0.18 | 0.16 | 0.15 | |
| Permanent hardness | °dH | SFS 3003 | 3.8 | 3.4 | 5.8 | 5.1 | 4.7 | 1.9 | 1.9 | 3.8 | |
| Permanent hardness | mmol/l | SFS 3003 | 0.68 | 0.60 | 1.0 | 0.91 | 0.84 | 0.34 | 0.35 | 0.67 | |
| Calsium, Ca | mg/l | ISO 11885 | 26 | 21 | 25 | 24 | 24 | 9.2 | 9.2 | | |
| Magnesium, Mg | mg/l | ISO 11885 | 1.4 | 1.8 | 12 | 9.2 | 7.0 | 2.9 | 2.9 | | |
| Aluminium, Al | mg/l | SFS 5736 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | | 0.2 |
| Potassium, K | mg/l | ISO 11885 | 1.0 | 1.5 | 5 | 3.7 | 3.2 | 1.8 | 1.8 | | |
| Sodium, Na | mg/l | ISO 11885 | 3.7 | 3.1 | 16 | 18 | 14 | 16 | 15 | | 200 |
| Chloride, Cl | mg/l | ISO 10304 | 4.8 | 4.3 | 26 | 32.8 | 23 | 10.7 | 7.3 | | 250 |
| Fluoride, F | mg/l | ISO 10304 | 0.09 | 0.11 | 0.3 | 0.17 | 0.17 | 0.08 | 0.10 | | 1.5 |
| Sulphate | mg/l | ISO 10304 | 34 | 27 | 47 | 46 | 27 | 8.8 | 8.8 | | 250 |
| Nitrate | mg/l | ISO 13395 | 0.83 | 0.51 | 0.51 | 5.6 | 5.9 | 5.3 | 4.3 | | 50 |
| Nitrite | mg/l | SFS 3029 | <0.003 | <0.003 | <0.003 | <0.003 | <0.003 | <0.003 | <0.003 | <0.003 | 0.5 |
| Ammonium | mg/l | SFS 3032 | 0.002 | 0.002 | 0.001 | 0.001 | 0.001 | 0.002 | 0.002 | | 0.5 |
| Odour | | Internal method | Accepted | Accepted | Accepted | Accepted | Accepted | Accepted | Accepted | | *** |
| Taste | | Internal method | Accepted | Accepted | Accepted | Accepted | Accepted | Accepted | Accepted | | *** |

* Finnish Decrees of Drinking Water Quality STM 1352/2015, STM 683/2017 ja STM 2/2023 (Comply with EU Directive 2020/2184 on the quality of water intended for human consumption)

** No abnormal change

*** Acceptable to consumers and no abnormal change