

## DRINKING WATER FOR SANS 241:2015

The limits and associated risks for domestic water as determined by the South African National Standard (SANS) 241:2015 are as follows, where:

- Health risks: parameters falling outside these limits may cause acute or chronic health problems in individuals.
- Aesthetic risks: parameters falling outside these limits indicate that water is visually, aromatically or palatably unacceptable.
- Operational risks: parameters falling outside these limits may indicate that operational procedures to ensure water quality standards are met may have failed.

MICROBIOLOGICAL DETERMINANDS		
	Risk	Limits
<i>E.coli</i> or Fecal coliforms count/100ml	health	Not detected
Cytosporidium species count/10mL	health	Not detected
Giardia species count/10mL	health	Not detected
Total coliforms count/100ml.	operational	< 10
Heterotrophic plate count count/1ml	operational	< 1000
PHYSICAL, AESTHETIC, OPERATIONAL AND CHEMICAL DETERMINANDS		
Free chlorine mg/L	health	≤ 5
Monochloramine mg/L	health	≤ 3
Colour Pt-Co	aesthetic	< 15
Conductivity at 25degC mS/m	aesthetic	≤ 170
Total dissolved solids mg/L	aesthetic	≤ 1200
Turbidity	operational	≤ 1
	aesthetic	≤ 5
pH at 25degC	operational	≥ 5 and ≤ 9.7
Nitrate as N mg/L	health	≤ 11
Nitrite as N mg/L	health	≤ 0.9
Nitrate-Nitrite ratio		≤ 1
Sulfate as SO <sub>4</sub> <sup>-</sup> mg/L	health	≤ 500
	aesthetic	≤ 250
Fluoride as F <sup>-</sup> mg/L	health	≤ 1.5
Ammonia as N mg/L	aesthetic	≤ 1.5

Chloride as Cl <sup>-</sup> mg/L	aesthetic	≤ 300
Sodium mg/L	aesthetic	≤ 200
Zinc mg/L	aesthetic	≤ 5
Antimony µg/L	health	≤ 20
Arsenic µg/L	health	≤ 10
Barium µg/L	health	≤ 700
Boron µg/L	health	≤ 2400
Cadmium µg/L	health	≤ 3
Chromium µg/L	health	≤ 50
Cobalt µg/L	health	≤ 500
Copper µg/L	health	≤ 2000
Cyanide µg/L	health	≤ 200
Iron µg/L	health	≤ 2000
	aesthetic	≤ 300
Lead µg/L	health	≤ 10
Manganese µg/L	health	≤ 400
	aesthetic	≤ 100
Mercury µg/L	health	≤ 6
Nickel µg/L	health	≤ 70
Selenium µg/L	health	≤ 40
Uranium µg/L	health	≤ 30
Vanadium µg/L	health	≤ 200
Aluminium µg/L	operational	≤ 300
Total organic carbon mg/L	health	≤ 10
Chloroform µg/L	health	≤ 300
Bromoform µg/L	health	≤ 100
Dibromochloromethane µg/L	health	≤ 100
Bromodichloromethane µg/L	health	≤ 60
Trihalomethane ratio		≤ 1
Microcystin µg/L	health	≤ 1
Phenols µg/L	aesthetic	≤ 10