

## INDIAN STANDARD DRINKING WATER - SPECIFICATION ( BIS 10500 : 1991 )

Sl.No	Substance or Characteristic	Requirement (Desirable Limit)	Permissible Limit in the absence of Alternate source
<b>Essential characteristics</b>			
1.	Colour, ( Hazen units, Max )	5	25
2.	Odour	Unobjectionable	Unobjectionable
3.	Taste	Agreeable	Agreeable
4.	Turbidity ( NTU, Max)	5	10
5.	pH Value	6.5 to 8.5	No Relaxation
6.	Total Hardness (as CaCO <sub>3</sub> ) mg/lit.,Max	300	600
7.	Iron (as Fe) mg/lit,Max	0.3	1.0
8.	Chlorides (as Cl) mg/lit,Max.	250	1000
9.	Residual,free chlorine,mg/lit,Min	0.2	--
<b>Desirable Characteristics</b>			
10.	Dissolved solids mg/lit,Max	500	2000
11.	Calcium (as Ca) mg/lit,Max	75	200
12.	Copper (as Cu) mg/lit,Max	0.05	1.5
13.	Manganese (as Mn)mg/lit,Max	0.10	0.3
14.	Sulfate (as SO <sub>4</sub> ) mg/lit,Max	200	400
15.	Nitrate (as NO <sub>3</sub> ) mg/lit,Max	45	100
16.	Fluoride (as F) mg/lit,Max	1.9	1.5
17.	Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH)mg/lit, Max.	0.001	0.002
18.	Mercury (as Hg)mg/lit,Max	0.001	No relaxation
19.	Cadmium (as Cd)mg/lit,Max	0.01	No relaxation
20.	Selenium (as Se)mg/lit,Max	0.01	No relaxation
21.	Arsenic (as As) mg/lit,Max	0.05	No relaxation
22.	Cyanide (as CN) mg/lit,Max	0.05	No relaxation
23.	Lead (as Pb) mg/lit,Max	0.05	No relaxation
24.	Zinc (as Zn) mg/lit,Max	5	15
25.	Anionic detergents (as MBAS) mg/lit,Max	0.2	1.0
26.	Chromium (as Cr <sup>6+</sup> )mg/lit,Max	0.05	No relaxation
27.	Polynuclear aromatic hydro carbons (as PAH) g/lit,Max	--	--
28.	Mineral Oil mg/lit,Max	0.01	0.03
29.	Pesticides mg/l, Max	Absent	0.001
30.	Radioactive Materials		
	i. Alpha emitters Bq/l,Max	--	0.1
	ii. Beta emitters pci/l,Max	--	1.0
31.	Alkalinity mg/lit,Max	200	600
32.	Aluminium (as Al) mg/l,Max	0.03	0.2
33.	Boron mg/lit,Max	1	5