Water Quality Standards.

| **S.No** | **Parameters** | **BIS 10500-2012** | | **Packaged Drinking Water BIS 14543 – 2004** | **Packaged Natural Mineral Water BIS 13428– 2005** |
| --- | --- | --- | --- | --- | --- |
| **Acceptable Limit** | **Permissible Limit in the Absence of Alternate Source** |
| 1 | Colour Pt/Co Scale | 5 | 15 | 2 | 2 |
| 2 | Turbidity NTU | 1 | 5 | 2 | 2 |
| 3 | Total Dissolved solids mg/L | 500 | 2000 | 500 | 150-700 |
| 4 | pH | 6.5-8.5 | No relaxation | 6.5-8.5 | 6.5-8.5 |
| 5 | Alkalinity (as CaCO3) mg/L | 200 | 600 | 200 | 75-400 |
| 6 | Total hardness (as CaCO3) mg/L | 200 | 600 |  |  |
| 7 | Calcium (as Ca) mg/L | 75 | 200 | 75 | 100 |
| 8 | Magnesium (as Mg) mg/L | 30 | 100 | 30 | 50 |
| 9 | Iron (as Fe) mg/L | 1.0 | No Relaxation | 0.1 | Not specified |
| 10 | Manganese (as Mn) mg/L | 0.1 | 0.3 | 0.1 | 2.0 |
| 11 | Chloride (as Cl) mg/L | 250 | 1000 | 200 | 200 |
| 12 | Fluoride (as F) mg/L | 1.0 | 1.5 | 1.0 | 1.0 |
| 13 | Sulphate (as SO4) mg/L | 200 | 400 | 200 | 200 |
| 14 | Nitrate (as NO3) mg/L | 45 | No Relaxation | 45 | 50 |
| 15 | Copper (as Cu) mg/L | 0.05 | 1.5 | 0.05 | 1.0 |
| 16 | Cadmium (as Cd) mg/L | 0.003 | No Relaxation |  |  |
| 17 | Selenium (as Se) mg/L | 0.01 | No Relaxation | 0.01 | 0.05 |
| 18 | Mercury (as Hg) mg/L | 0.001 | No Relaxation |  |  |
| 19 | Arsenic (as As) mg/L | 0.01 | No Relaxation |  |  |
| 20 | Lead (as Pb) mg/L | 0.01 | No Relaxation |  |  |
| 21 | Zinc (as Zn) mg/L | 5 | 15 | 5 | 5 |

**WATER QUALITY PARAMETERS AND BIS STANDARDS FOR VARIOUS CHEMICAL AND BIOLOGICAL CONSTITUENTS**

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No.** | **Parameters** | **Drinking water** **IS 10500 : 2012** | |
| **Permissible Limit** | **Maximum Limit** |
| **1** | **Odor** | **Agreeable** | **Agreeable** |
| **2** | **Taste** | **Agreeable** | **Agreeable** |
| **3** | **pH** | **6.5 to 8.5** | **No relaxation** |
| **4** | **TDS (mg/l)** | **500** | **2000** |
| **5** | **Hardness (as CaCO3) (mg/l)** | **200** | **600** |
| **6** | **Alkalinity (as CaCO3) (mg/l)** | **200** | **600** |
| **7** | **Nitrate (mg/l)** | **45** | **No relaxation** |
| **8** | **Sulfate (mg/l)** | **200** | **400** |
| **9** | **Fluoride (mg/l)** | **1** | **1.5** |
| **10** | **Chloride (mg/l)** | **250** | **1000** |
| **11** | **Turbidity (NTU)** | **5** | **10** |
| **12** | **Arsenic (mg/l)** | **0.01** | **0.05** |
| **13** | **Copper (mg/l)** | **0.05** | **1.5** |
| **14** | **Cadmium (mg/l)** | **0.003** | **No relaxation** |
| **15** | **Chromium (mg/l)** | **0.05** | **No relaxation** |
| **16** | **Lead (mg/l)** | **0.01** | **No relaxation** |
| **17** | **Iron (mg/l)** | **0.3** | **No relaxation** |
| **18** | **Zinc (mg/l)** | **5** | **15** |
| **19** | **Fecal Coliform (cfu)** | **0** | **0** |
| **20** | **E. Coli (cfu)** | **0** | **0** |

**WATER QUALITY PARAMETERS AND BIS STANDARDS FOR VARIOUS CHEMICAL AND BIOLOGICAL CONSTITUENTS**

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No.** | **Parameters** | **Drinking water** **IS 10500 : 2012** | |
| **Permissible Limit** | **Maximum Limit** |
| **1** | **Colour** | **Agreeable** | **Agreeable** |
| **2** | **Odor** | **Agreeable** | **Agreeable** |
| **3** | **Taste** | **Agreeable** | **Agreeable** |
| **4** | **pH** | **6.5 to 8.5** | **No relaxation** |
| **5** | **TDS (mg/l)** | **500** | **2000** |
| **6** | **Hardness (as CaCO3) (mg/l)** | **200** | **600** |
| **7** | **Alkalinity (as CaCO3) (mg/l)** | **200** | **600** |
| **8** | **Sulphate (mg/l)** | **200** | **400** |
| **9** | **Chloride (mg/l)** | **250** | **1000** |
| **10** | **Turbidity (NTU)** | **5** | **10** |
| **11** | **Copper (mg/l)** | **0.05** | **1.5** |
| **12** | **Iron (mg/l)** | **0.3** | **No relaxation** |

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No.** | **Parameters** | **IS 10500: 2012, IS 3025(Part 40)** | |
| **Permissible Limit** | **Maximum Limit** |
| 1 | Colour | Agreeable | Agreeable |
| 2 | Odour | Agreeable | Agreeable |
| 3 | Taste | Agreeable | Agreeable |
| 4 | pH | 6.5 to 8.5 | No relaxation |
| 5 | Turbidity (NTU) | 1 | 5 |
| 5 | Alkalinity (as CaCO3) (mg/L) | 200 | 600 |
|  | Electrical Conductivity  (μmhos/cm) | 400 | 1500 |
| 6 | TDS (mg/L) | 500 | 2000 |
|  | Chloride (mg/L) | 250 | 1000 |
| 7 | Hardness (as CaCO3) (mg/L) | 200 | 600 |
| 8 | Calcium (as Ca) mg/L | 250 | 1000 |
| 9 | Magnesium (as Mg) mg/L | 30 | 100 |
| 10 | Sulphate (mg/L) | 200 | 400 |