

Sample Container, Preservation, Holding Time and Volume

Parameter	Container	Preservation	Maximum Holding Time	Volume Required
Bacteriological Parameters				
Total Coliform	Plastic or Glass - Sterilized	Cool 10°C, $\text{Na}_2\text{S}_2\text{O}_3$	30 hours	100 mL
Fecal Coliform	Plastic or Glass - Sterilized	Cool 10°C, $\text{Na}_2\text{S}_2\text{O}_3$	8 hours	200 mL
Standard (Heterotrophic) Plate Count	Plastic or Glass - Sterilized	Cool 10°C, $\text{Na}_2\text{S}_2\text{O}_3$	6 hours	100 mL
Aquatic Toxicity Tests				
Acute Toxicity	Plastic or Glass	Cool $\leq 6^{\circ}\text{C}$	36 hours	2 L
Inorganic Tests				
Acidity	Plastic or Glass	Cool $\leq 6^{\circ}\text{C}$	14 days	250 mL
Alkalinity	Plastic or Glass	Cool $\leq 6^{\circ}\text{C}$	14 days	250 mL
Ammonia-N	Plastic or Glass	Cool $\leq 6^{\circ}\text{C}$, H_2SO_4 to pH<2	28 days	250 mL
BOD	Plastic or Glass	Cool $\leq 6^{\circ}\text{C}$	48 hours	1 L
Boron	Plastic or Quartz	HNO_3 to pH<2	6 months	500 mL
Bromide	Plastic or Glass	None Required	28 days	250 mL
BOD, Carbonaceous	Plastic or Glass	Cool $\leq 6^{\circ}\text{C}$	48 hours	1 L
COD	Plastic or Glass	Cool $\leq 6^{\circ}\text{C}$, H_2SO_4 to pH<2	28 days	250 mL
Chloride	Plastic or Glass	Cool $\leq 6^{\circ}\text{C}$	28 days	250 mL
Chlorine (TRC and FRC)	Plastic or Glass	None Required	15 minutes	100 mL
Color	Plastic or Glass	Cool $\leq 6^{\circ}\text{C}$	48 hours	250 mL
Cyanide	Plastic or Glass	Cool $\leq 6^{\circ}\text{C}$, NaOH, Reducing Agent	14 days	1 L
Fluoride	Plastic	None Required	28 days	250 mL
Hardness	Plastic or Glass	HNO_3 or H_2SO_4 to pH<2	6 months	250 mL
pH (Hydrogen Ion)	Plastic or Glass	None Required	15 minutes	100 mL
TKN	Plastic or Glass	Cool $\leq 6^{\circ}\text{C}$, H_2SO_4 to pH<2	28 days	250 mL
Nitrate	Plastic or Glass	Cool $\leq 6^{\circ}\text{C}$	48 hours	250 mL
Nitrate-Nitrite	Plastic or Glass	Cool $\leq 6^{\circ}\text{C}$, H_2SO_4 to pH<2	28 days	250 mL
Nitrite	Plastic or Glass	Cool $\leq 6^{\circ}\text{C}$	48 hours	250 mL
Oil & Grease (HEM)	Glass	Cool $\leq 6^{\circ}\text{C}$, HCl or H_2SO_4 to pH<2	28 days	1 L
Organic Carbon, Total	Glass	Cool $\leq 6^{\circ}\text{C}$, HCl, H_3PO_4 or H_2SO_4 to pH<2	28 days	100 mL
Phosphorus, Ortho	Plastic or Glass	Cool $\leq 6^{\circ}\text{C}$	48 hours	250 mL
Phosphorus, Total	Plastic or Glass	Cool $\leq 6^{\circ}\text{C}$, H_2SO_4 to pH<2	28 days	250 mL
Oxygen, Dissolved, Probe Method	NA	None Required	15 minutes	100 mL
Phenols	Glass	Cool $\leq 6^{\circ}\text{C}$, H_2SO_4 to pH<2	28 days	1 L
Residue, Total (Total Solids or TS)	Plastic or Glass	Cool $\leq 6^{\circ}\text{C}$	7 days	1 L
Residue, Filterable (TDS)	Plastic or Glass	Cool $\leq 6^{\circ}\text{C}$	7 days	1 L
Residue, Nonfilterable (TSS)	Plastic or Glass	Cool $\leq 6^{\circ}\text{C}$	7 days	1 L
Residue, Settleable (Settleable Solids)	Plastic or Glass	Cool $\leq 6^{\circ}\text{C}$	48 hours	1 L
Residue, Volatile (VSS)	Plastic or Glass	Cool $\leq 6^{\circ}\text{C}$	7 days	1 L
Silica	Plastic or Quartz	Cool $\leq 6^{\circ}\text{C}$	28 days	250 mL
Specific Conductance (Conductivity)	Plastic or Glass	Cool $\leq 6^{\circ}\text{C}$	28 days	250 mL
Sulfate	Plastic or Glass	Cool $\leq 6^{\circ}\text{C}$	28 days	250 mL
Sulfide	Plastic or Glass	Cool $\leq 6^{\circ}\text{C}$, add zinc acetate and NaOH to pH>9	7 days	250 mL
Sulfite	Plastic or Glass	None Required	15 minutes	250 mL
Surfactants	Plastic or Glass	Cool $\leq 6^{\circ}\text{C}$	48 hours	250 mL
Temperature	Plastic or Glass	None Required	15 minutes	100 mL
Turbidity	Plastic or Glass	Cool $\leq 6^{\circ}\text{C}$	48 hours	250 mL
Metals				
Chromium VI	Plastic or Glass	Cool $\leq 6^{\circ}\text{C}$, pH 9.3 to 9.7	28 days	250 mL
Other Heavy Metals	Plastic or Glass	HNO_3 to pH<2	6 months	250 mL
Organics				
Volatile Compounds	Glass, FP-lined septum	Cool $\leq 6^{\circ}\text{C}$, $\text{Na}_2\text{S}_2\text{O}_3$, HCl to pH 2^2	14 days	100 mL
Semi-Volatile Compounds	Glass, FP-lined cap	Cool $\leq 6^{\circ}\text{C}$, $\text{Na}_2\text{S}_2\text{O}_3$, store in dark ²	7 days	1 L
Pesticides	Glass, FP-lined cap	Cool $\leq 6^{\circ}\text{C}$, pH 5 to 9	7 days	1 L
Radiological Tests				
Alpha, Beta and Radium	Plastic or Glass	HNO_3 to pH<2	6 months	1 L

2. Add reducing agent, such as sodium thiosulfate, if chlorine is present.