

Table 9.1
Required Containers, Preservation Techniques, and Holding Times for Drinking Water Samples, Except
Radiochemical Parameters

<u>Parameter</u>	<u>Preservation</u>	<u>Container</u> (“P” means plastic, hard or soft; “G” means <u>glass, hard or soft.</u>)	<u>Maximum Holding Time</u>
Total Coliform	Cool 4°C, 0.08% sodium thiosulfate (Na ₂ S ₂ O ₃)	P or G	30 hours
Alkalinity	Cool 4°C	P or G	14 days
Antimony	Conc HNO ₃ to pH < 2	P or G	6 months
Arsenic	Conc HNO ₃ to pH < 2	P or G	6 months
Asbestos	Cool 4°C	P or G	Filter within 48 hours
Barium	Conc HNO ₃ to pH < 2	P or G	0:00
Beryllium	Conc HNO ₃ to pH < 2	P or G	0:00
Cadmium	Conc HNO ₃ to pH < 2	P or G	6 months
Calcium	Conc HNO ₃ to pH < 2	P or G	6 months
Chloride	None	P or G	28 days
Chlorinated Hydrocarbons	Refrigerate at 4°C after collection, Ascorbic acid	Glass with foil or Teflon®-lined cap	14 days until extraction; 40 days after extraction
Chlorinated Pesticides	80mg/L Na ₂ S ₂ O ₃ (if residual chlorine (Cl ₂) is present) Cool 4°C	Glass with Teflon®-lined septum	7 days until extraction; 14 days after extraction
Chlorinated phenoxy Acids	80mg/L Na ₂ S ₂ O ₃ (if residual ClI ₂) is present) Cool 4°C	Glass with Teflon®-lined septum	14 days until extraction; 28 days after extraction
Chlorine dioxide	None	P or G	Analyze Immediately
Chlorinated Acids	Refrigerate at 4°C after collection, Ascorbic acid	Glass with foil or Teflon®-lined cap	7 days until extraction; 30 days after extraction
Chromium	Conc HNO ₃ to pH < 2	P or G	6 months
Copper	Conc HNO ₃ to pH < 2	P or G	6 months
Cyanide	NaOH to pH > 12, Cool 4°C, 0.6 g ascorbic acid	P or G	14 days
EDB/DBCP	Cool 4°C 0.08% Na ₂ S ₂ O ₃ (if residual Cl ₂) 1:1 HCl to pH < 2	Glass with Teflon®-lined septum	28 days
Fluoride	None	P	28 days
Free Chlorine Residual	None	P or G	Analyze Immediately
Lead	Conc HNO ₃ to pH < 2	P or G	6 months
Mercury	Conc HNO ₃ to pH < 2	P or G	28 days
N-Methyl-Carbamoyloximes	Monochloroacetic acid to pH 3	Glass with Teflon®-lined septum	28 days at -10°C
N-Methyl-Carbamates	80mg/L Na ₂ S ₂ O ₃ , Cool 4°C until storage, Store at -10°C		
Nickel	Conc HNO ₃ to pH < 2	P or G	6 months
Nitrate Chlorinated	Cool 4°C	P or G	28 days
Nitrate Non-chlorinated	Conc H ₂ SO ₄ to pH < 2	P or G	14 days
Nitrite	Cool 4°C	P or G	48 hours
Nitrogen- and Phosphorus-Containing Pesticides	80mg/L Na ₂ S ₂ O ₃ , (if residual Cl ₂) Cool 4°C	Glass (dark) with Teflon®-lined septum	14 days until extraction; 14 days after extraction
o-Phosphate Organic Compounds	Filter Immediately, Cool 4°C If residual Cl ₂ 40-50 mg sodium arsenite or sodium thiosulfate; if unchlorinated 6 N HCl to pH < 2	P or G Glass with Teflon®-lined septum	48 hours 7 days until extraction; 30 days after extraction
Organohalide Pesticides and Commercial PCB Products (Arochlors)	3mg Na ₂ S ₂ O ₃ or 7ul Na ₂ S ₂ O ₃ (0.04g/ml), Cool 4°C until analyzed	Glass with Teflon®-lined septum	If Heptachlor, 7 days until extraction; 40 days after extraction. If no ex-

<u>Parameter</u>	<u>Preservation</u>	<u>Container</u> (“P” means plastic, hard or soft; “G” means glass, hard or soft.)	<u>Maximum Holding Time</u> traction analysis 14 days
Ozone	None	G	Analyze Immediately
pH	None	P or G	Analyze Immediately
Selenium	Conc HNO ₃ to pH < 2	P or G	6 months
Silver	Conc HNO ₃ to pH < 2	P or G	6 months
Sodium	Conc HNO ₃ to pH < 2	P or G	6 months
Sulfate	Cool 4°C	P or G	28 days
Temperature	None	P or G	Analyze Immediately
Thallium	Conc HNO ₃ to pH < 2	P or G	6 months
TTHMs	Na ₂ S ₂ O ₃ if residual Cl ₂ and 6N HCl	Glass with Teflon®-lined septum	14 days
Total Dissolved Solids	Cool 4°C	P or G	7 days
Turbidity	Cool 4°C	P or G	48 hours
Volatile Aromatic and Unsaturated Organic Compounds	1:1 HCl to pH < 2 Cool, 4°C until analysis, Ascorbic acid	Glass with Teflon®-lined septum	14 days
Volatile Halogenated Organic Compounds	1:1 HCl to pH < 2 Cool, 4°C until analysis, Ascorbic acid	Glass with Teflon®-lined septum	14 days
Volatile Organic Compounds	1:1 HCl to pH < 2 Cool, 4°C until analysis, Ascorbic acid	Glass with Teflon®-lined septum	14 days