

Table 9.6

## Required Containers, Preservation Techniques, and Holding Times for CERCLA-CLP Aqueous and Non-Aqueous

<u>Parameter</u>	<u>Sample Container</u>	<u>Preservation</u>	<u>Maximum Holding Time</u>
Volatile Organics (Aqueous Sample)	Glass, white polypropylene or black phenolic plastic screw cap, Teflon®-lined septum	Cool, 4°C, dark 0.08% Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> if residual Cl <sub>2</sub>	10 Days
Volatile Organics (Non-Aqueous Sample)	Glass, polypropylene cap, white Teflon®-liner	Cool, 4°C, dark	10 days
Base Neutral/Acid Extractable (Semivolatile) Organics	Amber Glass, white polypropylene or black phenolic, baked polyethylene cap	Cool, 4°C, dark	Extraction-Aqueous continuous liquid-liquid extraction must be started within 5 days Non-Aqueous-10 days Analysis-40 days from validated time of sample receipt (at the laboratory)
Pesticide/PCBs	Amber Glass, white polypropylene or black phenolic baked polyethylene cap	Cool, 4°C, dark	Extraction-Aqueous continuous liquid-liquid extraction must be started within 5 days Non-Aqueous-10 days Analysis-40 days from validated time of sample receipt (at the laboratory)
High Level Volatile Organic Waste Samples (Aqueous)	Glass, black phenolic plastic or white polyethylene screw cap, Teflon®-lined septum	Cool, 4°C, dark	Analysis completed within 40 days of validated time of sample receipt (at the laboratory)
High Level Volatile Organic Waste Samples (Non-Aqueous)	Glass, black phenolic plastic or polyethylene cap, white Teflon®-liner	Cool, 4°C, dark	Analysis completed within 40 days of validated time of sample receipt (at the laboratory)
High Concentration Extractable Organic Waste Samples	Glass, white polypropylene or black phenolic, baked polyethylene cap	Cool, 4°C, dark	Analysis completed within 40 days of validated time of sample receipt (at the laboratory)
High Concentration Aroclors and Toxaphene Samples	Glass, white polypropylene or black phenolic, baked polyethylene cap	Cool, 4°C, dark	Analysis completed within 40 days of validated time of sample receipt (at the laboratory)
Polychlorinated Dibenzo-p-Dioxins (PCDDs) and Dibenzofurans (PCDFs)	Glass, polypropylene cap, white Teflon®-liner	Cool, 4°C, dark	None
Low Level Metals Aqueous except Hg	Plastic bottle, plastic cap, plastic liner	HNO <sub>3</sub> to pH < 2	180 days
Hg (Aqueous)	Plastic bottle, plastic cap, plastic liner	HNO <sub>3</sub> to pH < 2	28 days
Cyanide, total amenable to chlorination	Plastic bottle, plastic cap, plastic liner	Aqueous—0.6g ascorbic acid if residual Cl <sub>2</sub> NaOH to pH > 12, cool, 4°C, CaCO <sub>3</sub> in presence of sulfide	14 days
Total Nitrogen	Plastic bottle, plastic cap, plastic liner	H <sub>2</sub> SO <sub>4</sub> to pH < 2	28 days
Fluoride	Plastic bottle, plastic cap, plastic	Cool, 4°C until	28 days

<u>Parameter</u>	<u>Sample Container</u>	<u>Preservation</u>	<u>Maximum Holding Time</u>
Metals except Hg (Aqueous)	liner Plastic bottle, plastic cap, plastic liner	analysis HNO <sub>3</sub> to pH < 2	180 days
Metals except Hg (Non-Aqueous)	Flint glass bottle, black phenolic cap, polyethylene liner	Cool, 4°C	180 days
Hg (Aqueous)	Plastic bottle, plastic cap, plastic liner	HNO <sub>3</sub> to pH < 2	28 days
Hg (Non-Aqueous)	Flint glass bottle, black phenolic cap, polyethylene liner	HNO <sub>3</sub> to pH < 2	28 days
Cyanide (Aqueous)	Plastic bottle, plastic cap, plastic liner	0.6g ascorbic acid if residual Cl <sub>2</sub> NaOH to pH > 12, cool, 4°C until analyzed, CaCO <sub>3</sub> in presence of sulfide	14 days
Cyanide (Non-Aqueous)	Plastic bottle, plastic cap, plastic liner	Cool, 4°C	14 days
High Level Metals except Hg (Aqueous)	Flint glass, white polypropylene or black phenolic, baked polyethylene cap	H <sub>2</sub> SO <sub>4</sub> to pH < 2	180 days
High Level Metals except Hg (Non-Aqueous)	Flint glass, white polypropylene or black phenolic, baked polyethylene cap	Cool, 4°C	180 days
High Level Hg (Aqueous)	Flint glass, white polypropylene or black phenolic, baked polyethylene cap	H <sub>2</sub> SO <sub>4</sub> to pH < 2	28 days
High Level Hg (Non-Aqueous)	Flint glass, white polypropylene or black phenolic, baked polyethylene cap	Cool, 4°C	28 days
Low Level Volatile Organics	Glass, black phenolic or white polypropylene screw cap, Teflon®-lined septum	Cool, 4°C, dark, 0.008% Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	7 days
Low Level Semivolatile Organics	White polypropylene or black phenolic, baked polyethylene cap	Cool, 4°C, dark	Extraction—continuous extraction must be started within 5 days Analysis—40 days from start of extraction
Low Level Pesticides/PCBs Organics	Amber glass, white polypropylene or black phenolic, baked polyethylene cap	Cool, 4°C, dark	Extraction—continuous extraction must be started within 5 days Analysis—40 days from start of extraction