

DIQUAT

Test Description	Determination of Diquat in drinking water
Test Use	Useful for evaluating diquat in drinking water sources and finished drinking water.
Test Department	Organic Chemistry: Phone 860-920-6581/6693 Fax 860-920-6703
Methodology	EPA Method 549.2: Liquid-Solid Extraction and HPLC with UV Detection
Availability	Year-round
Sample Requirements	One (1) 1-L sample
Container type /Preservative	1-L Brown plastic bottle w/ preservative vials attached: 100 mg/L Sodium Thiosulfate preservative for chlorinated samples Sulfuric Acid preservative for biologically active samples (add until $\text{pH} \leq 2$)
Collection Instructions (Note 1)	For taps, remove aerators and let water run 4-5 minutes. For outdoor locations, sampling location should be in accordance with a preapproved quality assurance project plan.
Sample Holding Time & Transport	Samples are iced or refrigerated and kept in the dark at $4^{\circ} \pm 2^{\circ}\text{C}$ from time of collection until extraction. Samples must be extracted (i.e. lab initiates test) within 7 days of collection.
Unacceptable Conditions	Incomplete requisition form. Insufficient sample volume. Samples received beyond the 7-day holding time. Improper collection/container/preservative.
Requisition Form	Use the Organics/Radiation Water Examination request form.
Required Information	Fill out entire requisition form.
Limitations	Diquat is especially light sensitive, and adsorbs easily onto glass. Sample exposure to light and to untreated (i.e. non-silanized) glass should be avoided to prevent loss of analyte.
Additional Comments	

Note 1: See *New England States Environmental Sampling Guide*, latest edition.

<https://www.epa.gov/sites/production/files/2015-06/documents/NE-States-Sample-Collection-Manual.pdf>