

Method

References: USEPA Methods for Chemical Analysis of Water and Wastes, Method 425.1 (1983). APHA Standard Methods, 21st ed., Method 5540 C (2005). ASTM D 2330-02, Methylene Blue Active Substances.

Detergents can be introduced into the water supply by industry, soap manufacturers, and private households. Environmental analysts often include a determination of anionic detergents when assessing surface water pollution.

The methylene blue active substances (MBAS) method is used in a 3-minute procedure to measure anionic detergents in the 0-3 ppm (mg/L) range. The procedure features a unique extraction/sampling technique that eliminates several steps required in other test procedures and provides increased sensitivity.

Anionic detergents react with methylene blue to form a blue-colored complex that is extracted into an immiscible organic solvent. Results are expressed in ppm (mg/L) as linear alkylbenzene sulfonate (LAS), equivalent weight 325.

Shelf-life: eight months. We recommend stocking quantities that will be used within seven months.



Instrumental Kits

SAM Single-Analyte Photometer

(See page 15 for instrumental features)

Range: 0.25-2.50 ppm
Method: Methylene Blue

	Cat#
Detergents SAM Kit	I-2017
Instrumental Refill, 20 double-point ampoules, 21 test tubes, dropper bottle with cap, tip-breaking tool, instructions, and MSDS. Shelf-life 8 months.	
	R-9423
SAM Kit comes in a plastic case and contains everything needed to perform 20 tests: Instrumental Refill, SAM Photometer, 2 AA batteries, and instructions.	

Kit Components common to Detergents

Description	Cat#
Tip Breaking Tool Pack (5 ea)	A-0079
Reaction Tube w/Lid, Detergents (1 ea)	A-0087
Ampoule Caps Pack (100 ea)	A-0095

Instructions are posted on our website.



Visual Kit

Range: 0-3 ppm
MDL: 0.125 ppm / **Method:** Methylene Blue

	Cat#
CHEMets Kit	K-9400
CHEMets Refill, 20 ampoule sets, Shelf-life 8 months	R-9400
Comparator 0, 0.25, 0.50, 0.75, 1.0, 1.5, 2.0, 3.0 ppm	C-9400

Kit comes in a cardboard box and contains everything needed to perform 20 tests: Refill, Comparator, reaction tube with lid, tip breaking tool, ampoule caps, instructions, and MSDS.

