

Significance of Use

Present in waters and wastewaters, surfactants are discharged via aqueous waste from households, industrial laundering, and other cleansing operations. Generally present in detergents and other cleaning agents, a surfactant molecule consists of a strongly hydrophobic group and a strongly hydrophilic group, permitting solubility in both aqueous and nonaqueous media. When the hydrophilic group is negatively charged, it is deemed an anionic surfactant; when the hydrophilic group is positively charged, it is deemed a cationic surfactant.

Specifications	HI96769 Anionic Surfactants
Range	0.00 to 3.50 mg/L (ppm) as SDBS
Resolution	0.01 mg/L
Accuracy @ 25°C (77°F)	±0.04 mg/L ±3% of reading
Light Source	tungsten lamp
Light Detector	silicon photocell with narrow band interference filter @ 610 nm
Power Supply	9V battery
Auto-off	after ten minutes of non-use in measurement mode; after one hour of non-use in calibration mode; with last reading reminder
Environment	0 to 50°C (32 to 122°F); RH max 95% non-condensing
Dimensions	192 x 104 x 69 mm (7.6 x 4.1 x 2.7")
Weight	320g (11.3 oz.)
Method	adaptation of the USEPA method 425.1 and Standard Methods for the Examination of Water and Wastewater, 20th edition, 5540C, Anionic Surfactants as MBAS
Ordering Information	HI96769 is supplied with sample cuvettes (2) with caps, 9V battery, instrument quality certificate and instruction manual. CAL Check standards and testing reagents sold separately
	HI96769C kit includes photometer, CAL Check standards, sample cuvettes (2) with caps, 25 mL glass vial with cap, plastic pipettes (3), 9V battery, cuvette wiping cloth, instrument quality certificate, instruction manual and rigid carrying case. Reagents sold separately
Reagents and Standards	HI96769-11 CAL Check standard cuvettes
	HI95769-01 reagent for 40 anionic surfactants tests

HI96769

Anionic Surfactants Portable Photometer

• CAL Check™

- Allows for performance verification and calibration of the meter using NIST traceable standards.
- GLP
 - · Review of the last calibration date.
- Auto-shut off
 - Automatic shut off after 10 minutes of non-use when the meter is in measurement mode. Prevents wastage of batteries in the event the meter is accidentally left on.
- Battery status indicator
 - Indicates the amount of battery life left.
- Built-in timer
 - Display of time remaining before a measurement is taken. Ensures that all readings are taken at the appropriate reaction intervals for the test being performed.

• Error messages

 Messages on display alerting to problems including no cap, high zero, and standard too low.

Cooling lamp indicator

To maintain the desirable wavelength to be used for absorbance, it is necessary to ensure components are not overheated from the heat generated by the tungsten lamp. Each photometer is designed to allow a minimal amount of time for components to cool. The cooling lamp indicator is displayed prior to a reading being taken.

• Units of measure

• Appropriate unit of measure is displayed along with reading.

The HI96769 portable photometer is for the measurement of anionic surfactants. Hanna's portable photometers feature an advanced optical system; the combination of a special tungsten lamp, a narrow band interference filter, and silicon photodetector ensure accurate photometric readings every time. The Hanna exclusive CAL Check feature utilizes ready-made, NIST traceable standards to verify both meter validation and calibration. The exclusive cuvette locking system ensures that the cuvette is inserted into the measurement cell in the same position every time to maintain a consistent path length. 10

