

HI 84433

Formol Number Mini Titrator and pH Meter for Wines and Fruit Juices

- Data logging
Log on demand up to 100 total samples
- GLP features
- Eliminates subjective factors
- Can measure in units of meq/L, meq% or mg/L
- Three point calibration
- Automatic pH temperature compensation
- Automatic “anytime” help
- Intuitive user interface

All-in-One
Formol Number Titrator,
pH Meter, pH Electrode
and Magnetic Stirrer



The HI 84433 is an easy to use automatic mini titrator and pH meter designed for the rapid and accurate determination of formol number in wines or fruit juices. By eliminating subjective factors including color indicators, errors in mathematical calculations or erratic titrant additions from the measurement, the HI 84433 makes formol number determination precise.

A clear and intuitive user interface allows users to navigate the HI 84433's menus and functions quickly. A HELP key located on the keypad aids in set-up, calibration status and troubleshooting.

After an initial sample prep, the HI 84433 starts pump operation and titrates the sample to the endpoint. This instrument employs a powerful and effective algorithm to analyze the pH response to determine the exact pH endpoint, then uses this algorithm to make the necessary calculations.

The formol number determination is instantaneously displayed in selected measurement units on the large dot matrix display. The instrument is ready for the next analysis immediately.

The HI 84433 employs a simple peristaltic pump to ensure the best accuracy and repeatability in measurements. To ensure the most consistent results, pump calibrations can be performed with the provided HANNA standard.

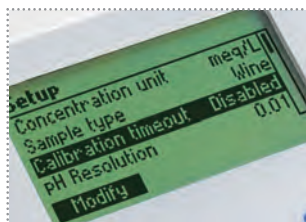
The HI 84433 has two operating options:

- 1) pH measurement using the meter in pH mode.
- 2) Formol number determination by titration of wines and fruit juice samples with sodium hydroxide solution to an 8.2 pH endpoint. (Note: sample step prep required)



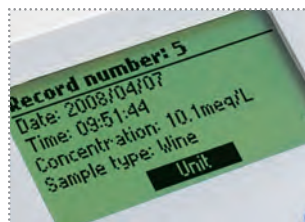
Clear, accurate measurements

Measurement results as well as electrode condition are clearly displayed on the LCD.



Setup configuration menu

Accessed from pH or Titration screens, this menu allows parameters such as date formats, measurement units and language selection to be configured quickly and easily.



Log and recall data

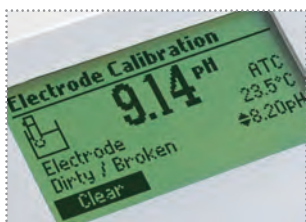
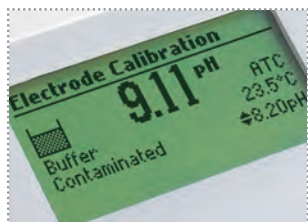
Measurements along with time and date can be stored and recalled at a later date.



Calibration reminder

When calibration is required or due, users are reminded on screen.

The HI 84433 can also display when pump and electrode calibration was last performed.



Calibration warnings

For the most accurate performance, The HI 84433 warns users if there are errors in the calibration process. HI 84433 pinpoints the problem and displays the appropriate error message. This takes the guesswork out of diagnosing errors such as dirty or broken electrodes or contaminated buffers.

Other calibration warnings include: wrong buffer temperature, wrong slope (high and low) and wrong buffer.

SPECIFICATIONS		HI 84433
Titrator	Range	meq/L as N: 2.5 - 50.0 meq/L meq% as N: 0.25 - 5.00 meq% mg/L (ppm) as N: 70 - 1400 mg/L (ppm)
	Resolution	0.1 meq/L 0.01 meq% 1 mg/L (ppm)
	Accuracy (@25°C/77°F)	5% of reading
	Titration Method	acid-base titration
	Principle	endpoint titration: 8.20 pH
	Pump Debit	0.5 mL/min
	Stirring Speed	600 rpm
	Logging Data	up to 50 samples
pH Meter	Range	-2.0 to 16.0 pH / -2.00 to 16.00 pH
	Resolution	0.1 pH / 0.01 pH
	Accuracy (@25°C/77°F)	±0.01 pH
	Calibration	one, two or three calibration points; three available buffers (4.01; 7.01; 8.20)
	Temperature Compensation	manual or automatic from -20 to 120°C (-4 to 248°F)
Temperature	Logging Data	up to 50 samples
	Range	-20.0 to 120.0°C (-4.0 to 248.0°F)
	Resolution	0.1°C
Electrode	Accuracy (@25°C/77°F)	±0.4°C without probe error
	Temperature Probe	HI 1131B glass body pH electrode with BNC connector and 1 m (3.3') cable
Environment		HI 7662-M stainless steel temperature probe with 1 m (3.3') cable (included)
Power Supply		0 to 50°C (32 to 122°F); RH max 95% non-condensing
Dimensions		12 VDC adapter (included)
Weight		208 x 214 x 163 mm (8.2 x 8.4 x 6.4") (with beaker)
		2200 g (77 oz.)

ORDERING INFORMATION

HI 84433-01 (115V) and HI 84433-02 (230V) are supplied with HI 1131B pH electrode, HI 7662-M temperature probe, HI 84433-50 low concentration titrant solution (100 mL), HI 84433-51 pH adjustment solution (100 mL), HI 84433-55 pump calibration solution (100 mL), HI 84433-60 Formol base reagent (100 mL), HI 70004 pH 4.01 buffer solution sachets (2), HI 70007 pH 7.01 buffer solution sachets (2), HI 700082 pH 8.20 buffer solution sachets (2), 100 mL beakers (2), tube set with dispensing tip (2), magnetic stir bars, medium (2), 12 VDC adapter and instruction manual.

REAGENTS

- HI 84433-50 Titrant solution, low concentration, 100 mL
- HI 84433-51 pH adjustment solution, 100 mL
- HI 84433-55 Pump calibration solution, 100 mL
- HI 84433-58 Additional reagent, 30 mL
- HI 84433-60 Formol base reagent, 230 mL
- HI 84433-70 Reagents kit

SOLUTIONS

- HI 7004M pH 4.01 buffer solution, 230 mL
- HI 7007M pH 7.01 buffer solution, 230 mL
- HI 70082M pH 8.20 buffer solution, 230 mL
- HI 70300M Electrode storage solution, 230 mL
- HI 7061M Electrode cleaning solution, 230 mL
- HI 731312 Red wine decolorization kit (25 pcs)

OTHER ACCESSORIES

- HI 70483T Tube set, cap and tip for titrant bottle
- HI 731319 Stir bar 25 x 7 mm (10)
- HI 731342 2000 µL fixed volume pipette for automatic dosage
- HI 731341 1000 µL fixed volume pipette for automatic dosage