

HI96785

Honey Color Portable Analyzer



- 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

The HI96785 portable analyzer is for the determination of honey color. 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 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 10 mm path length.

Significance of Use

The primary characteristic for commercial honey classification is color. Color classes are expressed in millimeters (mm) Pfund as compared to an analytical grade glycerol standard reference.

The natural color of honey presents many tonalities: from straw yellow to amber, from dark amber to almost black with a hint of red. The color of untreated honey originates from the botanical varieties used by the bees; for this reason, its coloration allows one to commercially identify the original floral type.

The color of honey tends to darken with age or change according to the method of conservation or production used by beekeepers. These practices can include the use of old beehives, contact with metals, the temperature of conservation, and exposure to light.

The HI96785 uses direct measurement to determine honey coloration ranging from 0 to 150 mm Pfund. This photometer has a tungsten lamp with a narrow band interference filter to isolate the 420 nm and 525 nm wavelength. All samples are measured in a square cuvette having a 10 mm light path and are compared to a glycerol standard. The percent light transmittance readings are directly displayed as mm Pfund. With its advanced optical system, the highly precise meter eliminates subjectivity to provide readings that are accurate and repeatable.

The table upper left reports the USDA classification for honey samples and the related mm Pfund values.



USDA Color Standards Designations	Color Range Pfund Scales (mm)
Water White	8 or less
Extra White	Over 8 to and including 17
White	Over 17 to and including 34
Extra Light Amber	Over 34 to and including 50
Light Amber	Over 50 to and including 85
Amber	Over 85 to and including 114
Dark Amber	Over 114

Specifications	HI96785
Range	0 to 150 mm Pfund
Resolution	1 mm Pfund
Accuracy @25°C (77°F)	±2 mm Pfund @ 80mm Pfund
Light Source	tungsten lamps
Light Detector	silicon photocells with narrow band interference filter @ 420 nm and 525 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	direct measure
Ordering Information	HI96785 is supplied with sample cuvettes (5), 9V battery, light shield cap, cuvette wiping cloth, rigid carrying case, instrument quality certificate and instruction manual.
Accessories	HI93703-57 glycerol, (4) 30 mL
	HI93703-56 consists of 90 matched square cuvettes, 30 mL of glycerol and (2) 5 mL syringes (75 tests average)