HI96759

Maple Syrup Portable Photometer

Application Designed Photometers

- Calibrates 100% Transmittance with glycerol standard
- Uses 560 nm wavelength
- Disposable 10 mm square cuvettes
- Ideal for new Vermont (IMSI) standards
- USDA compliant
- GLP
  - Review of the last calibration date

The HI96759 is a handheld maple syrup transmittance analyzer that has a tungsten lamp with a narrow band interference filter to isolate the 560 nm wavelength. This photometer uses a 10 mm sample cuvettes and is calibrated to 100% transmittance with a Glycerol standard. All samples are compared to the glycerol standard and readings are displayed as % transmittance. With its advanced optical system, the highly precise meter eliminates subjectivity to provide readings that are accurate and repeatable.

Maple Syrup Quality

When choosing a maple syrup, it is important to consider its clarity along with color and taste. A light, clear syrup has a high level of quality and is indicative of a very pure product; a dark, cloudy syrup is less desirable, owing to the presence of impurities and suspended solids. In Canada and the United States, maple syrup is classified into different standards based on color and clarity. Lighter, clearer syrups are produced earlier in the season while darker syrups are produced later in the season. The lightest grade is characterized by its very pale color and has a light transmittance equal to or greater than 75%. The darkest grade has a light transmittance of less than 25%. The grade of maple syrup can be determined by using color comparators or by an instrument that measures how much light is transmitted through the syrup at a particular wavelength.

Range (% Transmittance)	State of Vermont Grades and Standards (New IMSI (International Maple Syrup Institute) standards)
75.0 to 100.0	grade A golden color/delicate taste
50 to 74.9	grade A amber color/rich taste
25 to 49.9	grade A dark color/robust taste
less than 25	grade A very dark color/strong taste

Specifications	HI96759	
Range	0.0 to 100.0% transmittance	
Resolution	0.1% transmittance	
Accuracy @ 25°C (77°F)	±3% @ 75.0% transmittance	
Light Source	tungsten lamp	
Light Detector	silicon photocell with narrow band interference filter 560 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	193 x 104 x 69 mm (7.6 x 4.1 x 2.7")	
Weight	360 g (12.7 oz.)	
Method	direct measure	
Ordering Information	**HI96759** are supplied with square sample cuvettes (6), light shield cap, 5 mL syringes (2), 30 mL bottle of glycerol, cuvette wiping cloth, 9V battery, instrument quality certificate, instruction manual and rigid carrying case.	
Solutions and Accessories	**HI93703-57**	glycerol, (4) 30 mL
	HI93703-50	cuvette cleaning solution, 230 mL
	HI93703-56	consists of 82 matched square cuvettes, glycerol standard(30 mL) and 5 mL syringes (2) (75 tests average)