

HI96759

Maple Syrup Portable Photometer

- Ideal for new Vermont (IMSI) standards
- USDA compliant
- GLP Features
 - Meets Good Laboratory Practices

The HI96759 handheld maple syrup transmittance analyzer is a high precision, USDA compliant photometer that brings judging "by eye" to an end.

The HI96759 measures the percent light transmittance of maple syrup as compared to analytical reagent glycerol. The transmittance value allows identification of syrup quality class.

A very light syrup color is the indicator of high grade. The difference in the transmittance of light of very light syrup and a glycerol standard will be negligible. A dark-colored syrup is graded lower than a light-colored syrup. The dark-colored syrup will allow less light to pass through the cuvette as compared to glycerol standard.

Maple Syrup Quality

When selecting 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 of over 75%. The darkest grade has a light transmittance of less than 25% (27%, non-IMSI standards).

The grade of maple syrup can be determined by using color comparators or by measuring how much light is transmitted through the syrup. Hanna provides the HI96759 handheld maple syrup transmittance analyzer, which compares the percentage of light that passes through the sample to that of a glycerol reagent. With its advanced optical system, the highly precise meter eliminates subjectivity to provide readings that are accurate and repeatable.



ADP
Application Designed Photometers

Range (% Transmittance)	United States, USDA	Range (% Transmittance)	State of Vermont Grades and Standards (New IMSI* standards)
75.0 to 100.0	grade A light amber	75.0 to 100.0	grade A golden color/delicate taste
60.5 to 74.9	grade A medium amber	50 to 74.9	grade A amber color/rich taste
44.0 to 60.4	grade A dark amber	25 to 49.9	grade A dark color/robust taste
27 to 43.9	grade B extra dark		
Less than 27	commercial	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)

*International Maple Syrup Institute

Standard reagents begin on page 10.70; CAL Check™ standard reagents begin on page 10.71

