

Maple Syrup Digital Grader

Handheld Colorimeter

- Easy to use
- Results are displayed % transmittance
- Small size, big convenience

The season of maple syrup production spans several months between winter and spring each year. As the days get longer and warmer and the nights stay below freezing, the sap from maple trees begins to flow and tapping begins. At the beginning of production season, the sap produces a lighter, sweeter syrup comprised of sucrose as the main sugar content. As the season progresses and temperatures rise, microorganisms grow and colonize the sap as it is collected. These bacteria, while not harmful, convert part of the sucrose present into invert sugars, glucose and fructose. The level of invert sugars in the sap, as well as the chemical processes that occur during boiling, are responsible for creating a darker and stronger flavored syrup product.

Maple syrup grading standards for the United States and Canada allow consumers to easily distinguish between the different grades of syrup, regardless of the place of origin.

The HI759 Maple Syrup Digital Grader is a handheld colorimeter designed for quick, accurate determination of the grade of maple syrup. The HI759 is designed as a more accurate alternative to temporary and permanent visual grading kits, providing quick, accurate results in four easy steps.

Step One - Add a sample to the included cuvette(s).

Step Two - Insert the glycerol reference cuvette, close the lid, and press the button to zero.

Step Three - Remove the glycerol reference cuvette and replace with a sample cuvette.

Step Four - Close the lid and press the button. Reading will be taken automatically and the results displayed.

This Maple Syrup Digital Grader measures the percent light transmittance of the syrup and directly displays the percentage results on the large, easy to read LCD display. Located on the back of the meter is a chart referencing the percent light transmittance to the grade. Eliminating the subjectivity of grading by eye and the potential for mislabeling, the HI759 is grading made simple.



State of Vermont Grades and Standards (New IMSI* standards)

| Grade A Color Classes | Taste | Light Transmittance |
|-----------------------|----------|---------------------|
| Grade A Golden | Delicate | ≥ 75 |
| Grade A Amber | Rich | 50 to 74 |
| Grade A Dark | Robust | 25 to 49 |
| Grade A Very Dark | Strong | < 25 |

* International Maple Syrup Institute

Specifications HI759

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| Range | 0 to 100% transmittance |
| Resolution | 1% transmittance |
| Accuracy | ±4% transmittance |
| Light Source | light emitting diode @ 560 nm |
| Light Detector | silicon photocell |
| Environment | 0 to 50°C (32 to 122°F); RH max 95% non-condensing |
| Battery Type | 1.5V AAA (1) |
| Auto-off | after ten minutes of non-use |
| Dimensions | 86.0 x 61.0 x 37.5 mm (3.4 x 2.4 x 1.5") |
| Weight | 64 g (2.3 oz) |
| Ordering Information | HI759 Checker®HC is supplied with sample cuvettes with caps (3), glycerol standard cuvette, plastic beakers (3), battery, and instructions. |
| Accessories | HI759-11 glycerol reference cuvettes (2 pcs) HI731359 round glass cuvettes with plastic inserts (25) |