

How to Use a Murphy Cup/Float

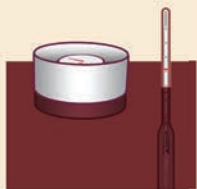
You Will Need

- **Murphy Compensation Cup OR
Murphy Compensation Float**
- **Syrup hydrometer with a BRIX scale**
*For best results, the hydrometer should be calibrated at 60°F.
(Canadian hydrometers may be calibrated at a different temperature.)*
- **Maple syrup sample**



Murphy Cup

- 1 Float your hydrometer in a syrup sample in the Murphy Cup.
- 2 Compare the hydrometer reading to the Murphy Cup reading. (See example on page 4).
- 3 Return the syrup sample to its original container. Rinse and dry the Murphy Cup and Hydrometer.



Murphy Float

- 1 Place your Murphy Compensation Float and hydrometer side by side in a vessel of syrup.
- 2 Compare the hydrometer reading to the Murphy Float reading. (See example on page 4).
- 3 Remove the Murphy Float and hydrometer from your syrup sample. Rinse and dry.

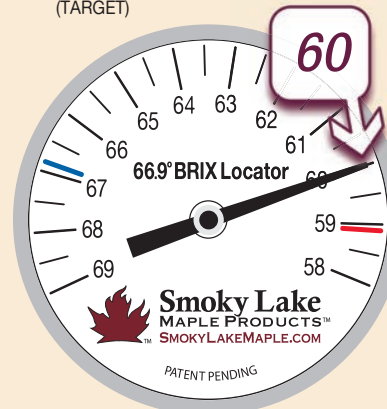
HYDROMETERS ARE FRAGILE! Be careful when releasing your hydrometer into a Murphy Cup — or ANY vessel. It could crack if it collides into the floor.

Tips

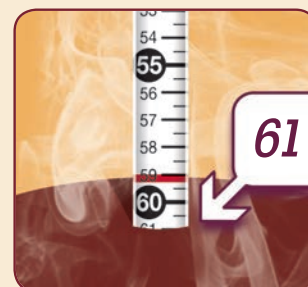
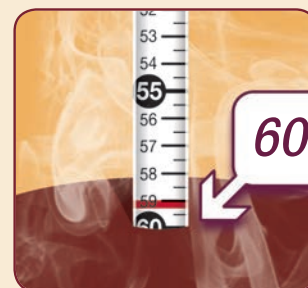
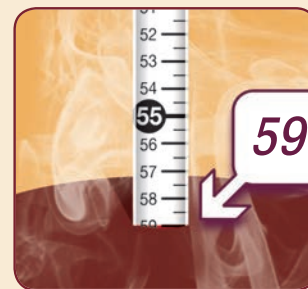
- Allow both the hydrometer and the dial to stabilize before taking a reading.
- Always start with a clean and dry hydrometer and Murphy Cup/Float.
- If the paper inside your hydrometer is loose, replace your hydrometer.
- If you are using a hydrometer that is calibrated at 68°F (common in Canada), add 0.16 BRIX to the dial reading to determine the most precise target value.

Comparing the Readings

EXAMPLE MURPHY DIAL READING
(TARGET)



BELOW ARE THREE EXAMPLE
HYDROMETER READINGS WHICH
ARE BEING COMPARED TO THE
ABOVE MURPHY DIAL READING.



Think of the reading on your Murphy Dial as a **TARGET** that your hydrometer must match. If the numbers match, your syrup is perfect density (66.9° BRIX). Your **TARGET** number will change based on the temperature of the syrup.

In the example to the left, the Murphy Dial says your hydrometer will float at its 60 mark if the syrup has perfect density.

The Murphy Dial calculated your **TARGET** based on the syrup sample's current temperature, 189°F. (See the "Discovering Syrup Temperature" section if you would like to learn more about using the Murphy Dial to determine temperature.)

Keep Boiling!

If the hydrometer reading is **LOWER** than the dial's reading, your syrup's sugar density is **LOWER** than 66.9° BRIX.

(59 - 60 = -1. So this sample is 1° BRIX lower than 66.9° BRIX.)

Just Right!

If the hydrometer reading **MATCHES** the dial's reading, your syrup's sugar density is **PERFECT!** (66.9° BRIX)

Oops! Add Sap!

If the hydrometer reading is **HIGHER** than the dial's reading, your syrup's sugar density is **HIGHER** than 66.9° BRIX.

(61 - 60 = 1. So this sample is 1° BRIX higher than 66.9° BRIX.)

The hydrometer depicted above has received accolades for being the most legible syrup hydrometer in the maple industry. Designed by Smoky Lake Maple Products.

Learn more at SmokyLakeMaple.com/gold