Achieving Perfect Density

WHY DENSITY IS IMPORTANT: If your finished product is less than 66% sugar density, it will spoil more quickly. In contrast, if your syrup is over 66.9% sugar density, you may develop sugar crystals at the bottom of your containers.

HOW TO USE A SYRUP HYDROMETER:

1) Fill a testing cup at least 8" deep with a sample of your maple syrup. (Wear rubber gloves to protect your hands if your syrup is hot.)

2) Since hydrometers are affected by temperature, use a thermometer and the below chart to determine your **target hydrometer reading**. (Hot syrup cools quickly, especially when placed in a cold cup. Work quickly.)

Syrup Temp (Fahrenheit)	209º	190º	170º	152º	133º	114º	95º	77º	58º	40º
Target Hydrometer Reading	59	60	61	62	63	64	65	66	67	68

*If you are using a **Murphy Compensation Cup**, you can skip this chart because the Murphy Dial calculates your target for you. Also, Murphy will update the calculation in real time as your sample's temperature changes.*

3) Slowly lower a clean hydrometer – bulb-side-down – all the way into the testing cup. (Hydrometers are fragile. Never *drop* it into the testing cup because it may break if it hits the bottom of your cup.) Allow the hydrometer to float freely and note the number at which the hydrometer is floating. If your hydrometer reading **matches** your target reading from Step 2, your syrup is at perfect density. If your hydrometer reading is **higher** than your target, slowly mix in sap until perfect density is achieved. If your hydrometer reading is **lower** than your target, continue boiling your syrup.

Smoky Lake Maple Products™
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← The HOT TEST line indicates finished syrup at 211ºF

← The COLD TEST line indicates finished syrup at 60ºF

66º – 66.9º BRIX
Excellent!

BRIX is a scale used to measure the percentage of sugar in a liquid. If someone says their syrup is "66 BRIX", that means that the syrup is 66% sugar.

NOTE: These instructions assume that you are using a hydrometer with a BRIX scale. It also assumes you are using a US hydrometer calibrated at 60ºF. The calibration temperature is written on the paper inside the hydrometer.

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