

How to use a Proof & Tralle (Liquor) Hydrometer

➤ ***Tools you will need:***

- Liquor Hydrometer (Proof & Tralle)
- Hydrometer Test Jar
- Alcohol beverage to test (must be at room temperature before testing.)
- The Proof & Tralle hydrometer should only be used for higher proof spirits and not low proof alcohol beverages like wine or beer. This hydrometer is not to be used to test a spirit that has residual sugars; like cordials, liqueurs and liquors with flavorings, like honey bourbon. The residual sugars in these liquids create buoyancy that cause the hydrometer to float and skew the readings. Use the Proof & Tralle hydrometer for your clear and brown liquors and of course, for moonshine!

➤ ***Handling the Hydrometer***

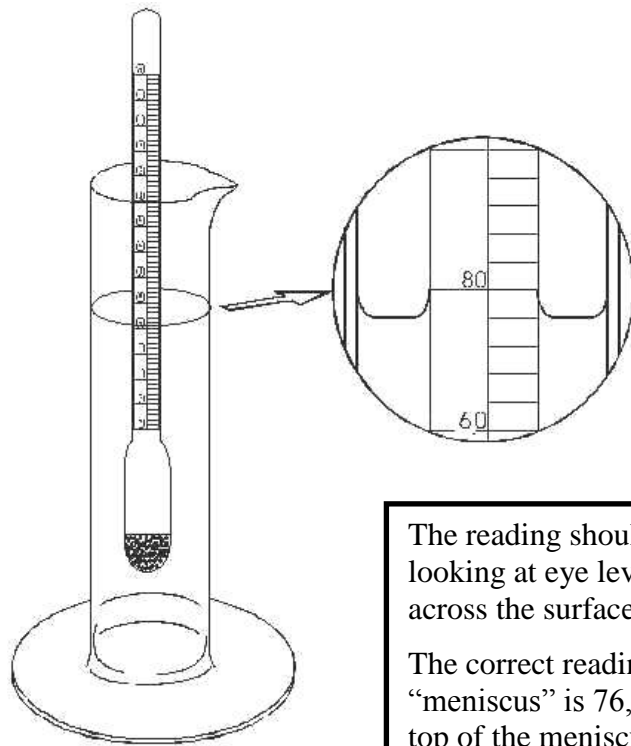
- Never hold the hydrometer by the center of the stem. Always hold the stem at the top of the hydrometer, as finger-marks down lower can affect the quality of the testing.
- Handle with extreme care at all times.

➤ ***Before using the Hydrometer***

- With a soft cloth, carefully wipe the hydrometer and inside of the test jar.
- If the liquid to be tested is not at room temperature, allow it to reach room temperature before testing.
- Pour the liquid slowly down the side of the test jar to avoid the formation of air bubbles. Fill the jar about 3/4 full with the liquid being tested.
- Do not take a reading by placing the hydrometer inside of a bottle. Always use a straight-sided test jar for accurate readings.

➤ ***Taking a Reading***

- Holding the hydrometer at the top of the stem, release it when it is approximately at its position of equilibrium (floating by itself).
- Press down on the top of the stem, pushing the hydrometer about an inch into the liquid beyond its equilibrium position. It should rise steadily and settle down to its position of equilibrium.
- Spin the hydrometer to remove any air bubbles that may be adhering to the side of the hydrometer.
- Take the reading by viewing the scale through the liquid and adjust your line of sight to the horizontal plane of the liquid surface. Do not take a reading if the hydrometer is touching the side of the jar.



The reading should be taken while looking at eye level through the cylinder across the surface of the liquid in the jar.

The correct reading at the bottom of the “meniscus” is 76, not 80 which is at the top of the meniscus.

The meniscus is the liquid arc that forms on the side of the hydrometer.

➤ **Adjust Reading for Temperature**

The hydrometer is designed for accurate proof readings at 60°F. When the liquid temperature is more than 60°F, an adjustment to the scale proof reading is required to determine the actual proof. Subtract the number in the chart below from the hydrometer proof reading:

<u>Fahrenheit degrees</u>	<u>Subtract this Number from Proof Reading</u>
80	8
75	6
70	4
65	2

Example: If the hydrometer proof reading was 86 and the temperature of the liquid was 75°F, then subtract 6 from 86 to get the actual proof of 80. Assume the liquid temperature is the same as the room temperature if the liquor has not been recently refrigerated.

A distilled spirit with a reading of 80 proof has 40% alcohol by volume. Proof is always twice the amount of alcohol by volume. When bartenders water down liquor to cover up for pilferage, the proof should show less than the proof written on the label of the liquor bottle.

If you have questions, please call customer service at 800.285.2337.
 To reorder hydrometers & test jars, go to the website AlcoholControls.com.