

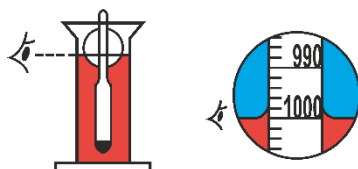


Scales on this hydrometer

- 0.980 to 1.120 Specific Gravity at 20°C
- 0 to 270 grams of sugar per litre
- 0-17% Potential Alcohol scale (assumes all sugars are fermented)

How to use your hydrometer

Make sure the hydrometer and trial jar are clean. The jar must be placed on a level surface so that the hydrometer will float straight. Place a sample of the liquid to be tested into the tube. You need to use enough liquid so that the hydrometer will float. Lower the hydrometer carefully into the jar. Spin to remove clinging bubbles. Make sure the hydrometer is floating straight and that the stem is not touching the sides. When the hydrometer is steady, read at the bottom surface of the liquid as shown in the diagram. The reading shown is 1.000 not 0.998.



Temperature corrections

Always take the temperature of the liquid you are testing. This hydrometer is calibrated for use at 20°C (68°F). Add the corrections shown to the specific gravity reading if the liquid tested is not at that temperature.

10°C (50°F)	-0.002
15°C (59°F)	-0.001
20°C (68°F)	None
24°C (75°F)	+0.001
28°C (82°F)	+0.002

Tips for using a hydrometer

Take any samples using a sterile sampler. Do not return test samples to the fermentation vessel.

Do not bottle the drink unless the specific gravity has fallen to the expected value (see recipe or kit instructions).

If you use a glass trial jar, take care as you lower the hydrometer into it.

Keep records of your hydrometer readings. You will need to know both the starting and finishing specific gravity readings to calculate % alcohol content.

Use the % alcohol calculation scale in the table to calculate alcohol content. Find the alcohol calculation values that correspond to your initial and final gravities. Subtract the final gravity figure from the initial gravity figure to get your % alcohol content.

Comparative Scales

Specific Gravity at 20°C (68°F)	°Brix/Balling/Plato % sugar by weight	Dissolved Sugar (grams per litre)	Dissolved Sugar (oz per UK gallon)	% Alcohol Calculation
0.980				-2.6
0.985				-1.9
0.990				-1.3
0.995				-0.6
1.000	0.0	0	0	0.0
1.005	1.3	13	2	0.6
1.010	2.6	26	4	1.3
1.015	3.8	39	6	1.9
1.020	5.1	52	8	2.6
1.025	6.3	64	10	3.3
1.030	7.6	78	13	3.9
1.035	8.8	91	15	4.6
1.040	10.0	104	17	5.3
1.045	11.2	117	19	5.9
1.050	12.4	130	21	6.6
1.055	13.6	143	23	7.3
1.060	14.8	157	25	8.0
1.065	15.9	169	27	8.7
1.070	17.1	183	29	9.3
1.075	18.2	195	31	10.0
1.080	19.4	209	34	10.7
1.085	20.5	222	36	11.4
1.090	21.6	235	38	12.1
1.095	22.7	248	40	12.8
1.100	23.8	261	42	13.6
1.105	24.9	275	44	14.3
1.110	26.0	288	46	15.0
1.115	27.0	301	48	15.7
1.120	28.1	314	50	16.4

Kit Brewing and Winemaking Tips

Making wine and beer from kits is the simplest method, but your hydrometer can still be very useful.

1. Your kit may give you an indication of the expected initial and final specific gravities. Check these with your hydrometer to make sure everything is going as it should. Don't bottle until it reaches the expected final gravity, since fermentation may not have finished. The final gravity for kit brewing is usually lower than for all grain brewing so should usually be below 1.010.
2. Check the progress of fermentation using your hydrometer. The specific gravity will fall as the sugar turns to alcohol. If it slows and stops before the expected final gravity, you may have a stuck fermentation – try warming up your fermenter and giving it a stir to get things going again.
3. Use your hydrometer to work out the % alcohol content of your wine or beer from the initial and final hydrometer readings.

Home Brewing Tips

If you are following recipes or trying out your own using extract or all grain brewing, your hydrometer will be even more useful.

1. If you are grain brewing, use your hydrometer after mashing to check how much sugar has been extracted from the malt. When sparging your mash, make sure you stop before the specific gravity of the wort running off drops below 1.008.
2. Use your hydrometer again after boiling and cooling your wort – some of the water will have evaporated, so the specific gravity and concentration of sugar will be higher.
3. If you are brewing with extract, use your hydrometer to make sure you are using the right proportions of water and extract when making up your wort.

Home Winemaking Tips

If you are making wines at home from fruit, use your hydrometer to make sure you have enough sugar for the type of wine you want to make.

1. The potential alcohol scale on your hydrometer and the table on page 1 shows you how strong your wine would be if all the sugars ferment into alcohol. This give you a guide for how much sugar you need for a desired strength of wine.
2. A very dry wine with no sugar left will have a final specific gravity of less than 1.000. Sweeter wines will have higher specific gravities and a lower alcohol content due to the remaining sugars.
3. Use the dissolved sugar scale on the hydrometer or table on page 1 if you have a wine must that is not sweet enough. Find the dissolved sugar values that correspond to the measured gravity and desired gravity of your must. Subtract the measured dissolved sugar figure from the desired one, and that is how much sugar in grams (or ounces) you need to add for each litre (or gallon) of your wine must.