

dropped if less than 0.05 or will be added as 0.1 if 0.05 or more.

*Example.* It is desired to ascertain the wine gallons and proof gallons of a tank of 190 proof spirits weighing 81,000 pounds.

81,000×0.14718=11,921.58=11,921.6 wine gallons.  
81,000×0.27964=22,650.84=22,650.8 proof gallons.

This table may also be used for ascertaining the quantity of water required to reduce to a given proof. To do this, divide the proof gallons of spirits to be reduced by the fractional part of a proof gallon per pound of spirits at the proof to which the spirits are to be reduced, and subtract from the quotient the net weight of the spirits before reduction. The remainder will be the pounds of water needed to reduce the spirits to the desired proof.

*Example.* It is desired to ascertain the quantity of water needed to reduce 1,000 pounds of 200 proof spirits, 302.58 proof gallons, to 190 proof:

302.58 divided by 0.27964 equals 1,082.03 pounds, weight of spirits after reduction.  
1,082.03 minus 1,000 equals 82.03 pounds, weight of water required to reduce to desired proof.

The slight variation between this table and Tables 2, 3, and 5 on some calculations is due to the dropping or adding of fractions beyond the first decimal in those tables. This table may also be used to determine the wine gallons (at 60 degrees Fahrenheit) of distilled spirits containing dissolved solids from the total weight of the liquid and its apparent proof (hydrometer indication, corrected to 60 degrees Fahrenheit). The proof gallons may then be found by multiplying the wine gallons by the true proof.

*Example.* 5,350 pounds of blended whisky containing added solids

Temperature °F.....75.0°  
Hydrometer reading.....92.0°  
Apparent proof.....85.5°  
Obscuration.....0.5°  
True proof.....86.0°  
5,350.0 lbs.×0.12676 (W.G. per pound factor for apparent proof of 85.5°)=678.2 wine gallons  
678.2 W.G.×0.86=583.3 proof gallons

(Sec. 201, Pub. L. 85-859, 72 Stat. 1358, as amended 1362, as amended (26 U.S.C. 5204, 5211))

**§ 30.65 Table 5, showing the weight per wine gallon (at 60 degrees Fahrenheit) and proof gallon at each percent of proof of spirituous liquor.**

This table may be used to ascertain the weight of any given number of wine gallons (at 60 degrees Fahrenheit) or proof gallons of spirits by multiplying the pounds per gallon by the given number of gallons of the spirits. The table should be especially useful where it is desired to weigh a precise quantity of spirits.

*Example.* It is desired to ascertain the weight of 100 wine gallons of 190 proof spirits:  
6.79434×100 equals 679.43 pounds, net weight of 100 wine gallons of 190 proofs spirits.

*Example.* It is desired to ascertain the weight of 100 proof gallons of 190 proof spirits.

3.57597×100 equals 357.60 pounds, net weight of 100 proof gallons of 190 proof spirits.

The slight variation between this table and Tables 2 and 3 on some calculations is due to dropping or adding of fractions beyond the first decimal on those tables. This table also shows the weight per wine gallon (at the prevailing temperature) corresponding to each uncorrected reading of a proof hydrometer.

(Sec. 201, Pub. L. 85-859, 72 Stat. 1358, as amended (26 U.S.C. 5204))

**§ 30.66 Table 6, showing respective volumes of alcohol and water and the specific gravity in both air and vacuum of spirituous liquor.**

This table provides an alternate method for use in ascertaining the quantity of water needed to reduce the strength of distilled spirits by a definite amount. To do this, divide the alcohol in the given strength by the alcohol in the required strength, multiply the quotient by the water in the required strength, and subtract the water in the given strength from the product. The remainder is the number of gallons of water to be added to 100 gallons of spirits of the given strength to produce a spirit of a required strength.

*Example.* It is desired to reduce spirits of 191 proof to 188 proof. We find that 191 proof spirits contains 95.5 parts alcohol and 5.59 parts water, and 188 proof spirits contains 94.0 parts alcohol and 7.36 parts water.