

Proof gallon. A United States gallon of proof spirits, or the alcoholic equivalent thereof.

Proof spirits. That liquid which contains one-half its volume of ethyl alcohol of a specific gravity of seven thousand nine hundred and thirty-nine ten-thousandths (0.7939) in vacuum at 60 degrees Fahrenheit referred to water at 60 degrees Fahrenheit as unity.

Spirits, spirituous liquor, or distilled spirits. That substance known as ethyl alcohol, ethanol, or spirits of wine in any form, including all dilutions and mixtures thereof, from whatever source or by whatever process produced, but not denatured spirits unless specifically stated. For the sole purpose of gauging wine and alcoholic flavoring materials on the bonded premises of a distilled spirits plant, such alcoholic ingredients shall have the same meaning described herein to spirits, spirituous liquor, or distilled spirits.

This chapter. Title 27, Code of Federal Regulations, Chapter I (27 CFR Chapter I).

U.S.C. The United States Code.

[T.D. ATF-198, 50 FR 8535, Mar. 1, 1985, as amended by T.D. ATF-438, 66 FR 5481, Jan. 19, 2001]

Subpart C—Gauging Instruments

§ 30.21 Requirements.

(a) *General.* The proof of distilled spirits shall be determined by the use of gauging instruments as prescribed in this part.

(b) *Proprietors.* Proprietors shall use only accurate hydrometers and thermometers that show subdivisions or graduations of proof and temperature which are at least as delimited as the instruments described in § 30.22.

(c) *Appropriate ATF officers.* Appropriate ATF officers shall use only hydrometers and thermometers furnished by the Government. However, where this part requires the use of a specific gravity hydrometer, ATF officers shall use precision grade specific gravity hydrometers conforming to the provisions of § 30.24, furnished by the proprietor. However, the appropriate ATF officer may authorize the use of other instruments approved by the appropriate ATF officer as being equally satisfactory for determination of specific grav-

ity and for gauging. From time to time appropriate ATF officers shall verify the accuracy of hydrometers and thermometers used by proprietors.

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

[T.D. ATF-198, 50 FR 8535, Mar. 1, 1985, as amended by T.D. ATF-438, 66 FR 5481, Jan. 19, 2001]

§ 30.22 Hydrometers and thermometers.

The hydrometers used are graduated to read the proof of aqueous alcoholic solutions at 60 degrees Fahrenheit; thus, they read, 0 for water, 100 for proof spirits, and 200 for absolute alcohol. Because of temperature-density relationships and the selection of 60 degrees Fahrenheit for reporting proof, the hydrometer readings will be less than the true percent of proof at temperatures below 60 degrees Fahrenheit and greater than the true percent of proof at temperatures above 60 degrees Fahrenheit. Hence, corrections are necessary for hydrometer readings at temperatures other than 60 degrees Fahrenheit. Precision hydrometers shall be used for gauging spirits. Hydrometers and thermometers shall be used and the true percent of proof shall be determined in accordance with § 30.31. Hydrometers are designated by letter according to range of proof and are provided in ranges and subdivisions of stems as follows:

Precision	Range	Subdivision
F	0 to 20	0.2°
G	20 to 40	0.2°
H	40 to 60	0.2°
I	60 to 80	0.2°
K	75 to 95	0.2°
L	90 to 110	0.2°
M	105 to 125	0.2°
N	125 to 145	0.2°
P	145 to 165	0.2°
Q	165 to 185	0.2°
R	185 to 206	0.2°

Thermometers are designated by type according to range of degrees Fahrenheit and are provided in ranges and subdivisions of degrees as follows:

Type	Range	Subdivision
Pencil type	10° to 100°	1°
V-back	10° to 100°	1°
Glass shell (earlier model)	40° to 100°	½°