§ 24.170 Measuring devices and testing instruments.

(a) Measuring devices. The appropriate TTB officer may at any time require proprietors to provide at their own expense equipment for ascertaining the capacity and contents of tanks and other storage containers, and scales and measuring devices for weighing and measuring wine, spirits, volatile fruit-flavor concentrate, or materials received and used in the production or treatment of wine. Where winemaking materials or other materials used in the treatment of wine are used immediately upon receipt on wine premises, or received and stored on bonded wine premises in original sealed shipping containers with a stated capacity, the quantity shown on the commercial invoice or other document covering the shipment may be accepted by the proprietor and entered into records in lieu of measuring the materials upon receipt.

(b) Testing instruments. The proprietor shall have ready access to equipment for determining the alcohol content unless the proprietor only receives and stores on wine premises bottled or packed wine with evidence showing the alcohol content has been determined. The proprietor who bottles or packs wine shall have ready access to equipment for determining the net contents of bottled or packed wine. The appropriate TTB officer may require other testing instruments based upon the proprietor’s operations. (Sec. 201, Pub. L. 85–859, 72 Stat. 1379, as amended, 1395, as amended (26 U.S.C. 5352, 5357, 5552))
of rehydrated yeast is limited to 0.5 percent. After fermentation natural wines may be blended with each other only if produced from the same kind of fruit.

(b) **Determination of wine produced.** Upon completion of fermentation or removal from the fermenter, the volume of wine will be accurately determined, recorded and reported on TTB F 5120.17, Report of Bonded Wine Premises Operations, as wine produced. Any wine or juice remaining in fermentation tanks at the end of the reporting period will be recorded and reported on TTB F 5120.17.


§ 24.177 **Chaptalization (Brix adjustment).**

In producing natural grape wine from juice having a low sugar content, pure dry sugar or concentrated grape juice may be added before or during fermentation to develop alcohol. In producing natural fruit wine from juice having a low sugar content, sugar, or concentrated juice of the same kind of fruit may be added before or during fermentation to develop alcohol. The quantity of sugar or concentrated juice added may not raise the original density of the juice above 25 degrees Brix. If grape juice or grape wine is ameliorated after chaptalization, the quantity of pure dry sugar added to juice for chaptalization will be included as ameliorating material. If fruit juice or fruit wine is ameliorated after chaptalization, pure dry sugar added under this section is not considered as ameliorating material. However, if fruit juice or fruit wine is ameliorated after chaptalization and liquid sugar or invert sugar syrup is used to chaptalize the fruit juice, the volume of water contained in the liquid sugar or invert sugar syrup will be included as ameliorating material. (Sec. 201, Pub. L. 85–859, 72 Stat. 1385, as amended (26 U.S.C. 5382, 5384))


§ 24.178 **Amelioration.**

(a) **General.** In producing natural wine from juice having a fixed acid level exceeding 5.0 grams per liter, the winemaker may adjust the fixed acid level by adding ameliorating material (water, sugar, or a combination of both) before, during and after fermentation. The fixed acid level of the juice is determined prior to fermentation and is calculated as tartaric acid for grapes, malic acid for apples, and citric acid for other fruit. Each 20 gallons of ameliorating material added to 1,000 gallons of juice or wine will reduce the fixed acid level of the juice or wine by 0.1 gram per liter (the fixed acid level of the juice or wine may not be less than 5.0 gram per liter after the addition of ameliorating material).

(b) **Limitations.** (1) Amelioration is permitted only at the bonded wine premises where the natural wine is produced.

(2) The ameliorating material added to juice or wine may not reduce the fixed acid level of the ameliorated juice or wine to less than 5.0 grams per liter.

(3) For all wine, except for wine described in paragraph (b)(4) of this section, the volume of ameliorating material added to juice or wine may not exceed 35 percent of the total volume of ameliorated juice or wine (calculated exclusive of pulp). Where the starting fixed acid level is or exceeds 7.69 grams per liter, a maximum of 538.4 gallons of ameliorating material may be added to each 1,000 gallons of wine or juice.

(4) For wine produced from any fruit (excluding grapes) or berry with a natural fixed acid of 20 parts per thousand or more (before any correction of such fruit or berry), the volume of ameliorating material added to juice or wine may not exceed 60 percent of the total volume of ameliorated juice or wine (calculated exclusive of pulp). If the starting fixed acid level is or exceeds 12.5 grams per liter, a maximum of 1,500 gallons of ameliorating material may be added to each 1,000 gallons of wine or juice. (26 U.S.C. 5383, 5384).