

**§ 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))

[T.D. ATF-299, 55 FR 24989, June 19, 1990, as amended by T.D. ATF-312, 56 FR 31078, July 9, 1991; T.D. ATF-413, 64 FR 46844, Aug. 27, 1999]

**§ 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).

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**§ 24.179 Sweetening.**

(a) *General.* In producing natural wine, sugar, juice or concentrated fruit juice of the same kind of fruit may be added after fermentation to sweeten wine. When juice or concentrated fruit juice is added, the solids content of the finished wine may not exceed 21 percent by weight. When liquid sugar or invert sugar syrup is used, the resulting volume may not exceed the volume which would result from the maximum use of pure dry sugar only.

(b) *Grape wine.* Any natural grape wine of a winemaker's own production may have sugar added after amelioration and fermentation provided the finished wine does not exceed 17 percent total solids by weight if the alcohol content is more than 14 percent by volume or 21 percent total solids by