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 amelio-

rating 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).

[T.D. ATF-299, 55 FR 24989, June 19, 1990, as amended by T.D. ATF-403, 64 FR 50253, Sept. 16, 1999; T.D. ATF-458, 66 FR 37578, July 19, 2001]

§ 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 weight if the alcohol content is not more than 14 percent by volume.
- (c) Fruit wine. Any natural fruit wine of a winemaker's own production may have sugar added after amelioration and fermentation provided the finished wine does not exceed 21 percent total solids by weight and the alcohol content is not more than 14 percent by volume.
- (d) Specially sweetened natural wine. Specially sweetened natural wine is produced by adding to natural wine of the winemaker's own production sufficient pure dry sugar, juice or concentrated fruit juice of the same kind of fruit, separately or in combination, so that the finished product has a total solids content between 17 percent and 55 percent by weight, and an alcohol content of not more than 14 percent by volume. Natural wine containing added wine spirits may be used in the production of specially sweetened natural

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wine; however, wine spirits may not be added to specially sweetened natural wine. Specially sweetened natural wines may be blended with each other, or with natural wine or heavy bodied blending wine (including juice or concentrated fruit juice to which wine spirits have been added), in the further production of specially sweetened natural wine only if the wines (or juice) so blended are made from the same kind of fruit. (Sec. 201, Pub. L. 85–859, 72 Stat. 1383, as amended, 1384, as amended, 1385, as amended (26 U.S.C. 5382, 5383, 5384, 5385))

[T.D. ATF-299, 55 FR 24989, June 19, 1990, as amended by T.D. ATF-312, 56 FR 31078, July 9, 1991]

§ 24.180 Use of concentrated and unconcentrated fruit juice.

Concentrated fruit juice reduced with water to its original density, or to 22 degrees Brix, or to any degree of Brix between its original density and 22 degrees Brix, and unconcentrated fruit juice reduced with water to not less than 22 degrees Brix, is considered juice for the purpose of standard wine production. Concentrated fruit juice reduced with water to any degree of Brix greater than 22 degrees Brix may be further reduced with water to any degree of Brix between its original density and 22 degrees Brix. The proprietor, prior to using concentrated fruit juice in wine production, shall obtain a statement in which the producer certifies the kind of fruit from which it was produced and the total solids content of the juice before and after concentration. Concentrated unconcentrated fruit juice may be used in juice or wine made from the same kind of fruit for the purposes of chaptalizing or sweetening, as provided in this part. Concentrated fruit juice, or juice which has been concentrated and reconstituted, may not be used in standard wine production if at any time it was concentrated to more than 80 degrees Brix. (Sec. 201, Pub. L. 85-859, 72 Stat. 1383, as amended (26 U.S.C.

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[T.D. ATF-299, 55 FR 24989, June 19, 1990, as amended by T.D. ATF-413, 64 FR 46845, Aug. 27, 1999]

§24.181 Use of sugar.

Only sugar, as defined in §24.10, may be used in the production of standard wine. The quantity of sugar used will be determined either by measuring the increase in volume or by considering that each 13.5 pounds of pure dry sugar results in a volumetric increase of one gallon. (Sec. 201, Pub. L. 85–859, 72 Stat. 1383, as amended, 1384, as amended, 1385, as amended (26 U.S.C. 5382, 5383, 5384, 5392))

[T.D. ATF-299, 55 FR 24989, June 19, 1990, as amended by T.D. ATF-312, 56 FR 31078, July 9, 1991]

§ 24.182 Use of acid to correct natural deficiencies.

(a) General. Acids of the kinds occurring in grapes or other fruit (including berries) may be added within the limitations of §24.246 to juice or wine in order to correct natural deficiencies; however, no acid may be added to juice or wine which is ameliorated to correct natural deficiencies except that in the production of grape wine, tartaric acid may be used to reduce the pH of the juice or wine. If tartaric acid is used to correct the pH of grape juice or wine, the fixed acid level of the juice shall be measured prior to the addition of any tartaric acid to determine the maximum quantity of ameliorating material allowed. In addition, when using tartaric acid to reduce the pH of ameliorated grape juice or wine, the pH cannot be reduced below 3.0.

(b) Grape wine. Tartaric acid or malic acid, or a combination of tartaric acid and malic acid, may be added prior to or during fermentation, to grapes or juice from grapes. In addition, after fermentation is completed, citric acid, fumaric acid, malic acid, lactic acid or tartaric acid, or a combination of two or more of these acids, may be added to correct natural deficiencies. However, the use of these acids, either prior to, during or after fermentation, may not increase the fixed acid level of the finished wine (calculated as tartaric acid) above 9.0 grams per liter. In cases where the wine contains 8.0 or more grams of total solids per 100 milliliters of wine, acids may be added to the extent that the finished wine does not contain more than 11.0 grams per liter