



## Winemaking Recipes

### Recipes for 1 Gallon

FRUIT	WEIGHT	WATER	SUGAR	ACID BLEND	TANNIN	YEAST
Apple	8 lb	5 ½ pt	2-2½ lb.	2 tsp.	½ tsp.	Lalvin 1118
Blackberry	4 lb.	7 pt	2-3 LB	2 tsp.	¼ tsp.	Lalvin RC-212
Cherry (Mont. sour)	5 LB	6 ½ pt	2-3 LB	1 tsp.	¼ tsp.	Lalvin K1V-1116
Cranberry	3 ½ LB	7 pt	2-3 LB	1 tsp.	¼ tsp.	Lalvin K1V-1116
Dandelion	6 cups petals	7 ½ pt	2-3 LB	4 tsp.	½ tsp.	Lalvin 1118
Elderberry	2 LB	7 pt	2-3 LB	2 tsp.	-----	Lalvin RC-212
Concord Grape	6-12 LB	6 pt -2 pt	1½-2½ lb	1 tsp.	¼ tsp.	Lalvin 1122
Grape (Calif.)	13-14 lb	-----	-----	-----	-----	Appropriate type
Grape (French Hybrid)	10-14 lb	-----	-----	-----	-----	Appropriate type
Grape (Wild)	4 lb	6 pt	2-3 lb	-----	-----	Lalvin RC 212
Mead	2½-3½ lb	7 pt	honey	5 tsp.	¼ tsp.	Lalvin D-47
Peaches	6-18 lb	0-5 pt	0-2½ lb	1-3 tsp.	½ tsp.	Lalvin D-47
Plums	4 lb	6 pt	2-3 lb	2 tsp.	½ tsp.	Lalvin K1V-1116
Raspberry	3 lb	7 pt	1½-2½ lb	2 tsp.	¼ tsp.	Lalvin K1V-1116
Rhubarb	4 ½ lb	6 pt	2-3 lb	-----	½ tsp.	Lalvin 1118
Strawberry	4 lb	6 pt	1½-2½ lb	1 tsp.	¼ tsp.	Lalvin K1V-1116

**IMPORTANT:** The above recipes should also include the following ingredients:

**Pectic enzyme** - 3-8 drops/ gal. (fruit)

**Yeast**— **Montrachet, Champagne, or another type.**

**Yeast Nutrient** - 1 tsp. /gal.

(These yeasts are alternatives for the above yeasts)

**Campden Tablet** - ½-1/gal. (¼-½/gal in high acid/low pH grape wines)

(Certain yeasts require a **yeast starter to be made** before adding to the must. Check on the package!)

### DIRECTIONS

1. Crush fruit; add **pectic enzyme**. With white grapes press out juice from skins. Add water. Allow to sit 1 hour.
2. Add crushed **Campden tablet**, or **Sodium (Potassium) Metabisulfite** powder, at rate of 1/12th teaspoon/ gallon.
3. Add sugar according to recipe, or adjust with hydrometer to **Specific Gravity** 1.085 for dry wines, or 1.120 for sweet.
4. Add remainder of ingredients (except yeast) according to recipe: **acid blend, tannin, & nutrient**.
5. Eight hours after step 2, add rehydrated **wine yeast**; or add prepared yeast starter. Use a primary fermentor large enough to allow for foaming (2-3 gallons). Food grade plastic makes a good fermentor. Cover with plastic wrap.
6. Stir twice daily. Press from fruit skins after 3-4 days. When wine has been fermenting 5-6 days, or when **S.G.** falls to 1.030, or when foam is gone from the surface (whichever event occurs first), syphon or strain into **Secondary Fermentor** leaving behind yeast deposit in the primary. Fill the Secondary completely up, allowing just enough space to attach the Fermentation Lock without the wine touching the rubber stopper. Fill fermentation lock half way with water. From this time forward till bottling, the Secondary Fermentor **must always** be kept full to the top. **Glass** is the preferable Secondary, with wood barrels next and plastic a very, very distant third. Plastic will oxidize the wine. Add malo-lactic culture if desired.
7. Fermentation should cease in 2-8 weeks, at 60 F., or above. Wine should be racked (syphoned) from sediment 3 weeks after placing in Secondary, and then again twice at monthly intervals after fermentation has stopped. Add ½ Campden tablet/gal. at every other racking. If closely monitoring SO2 levels, keep at 30 ppm at bottling.
8. When racking white wines, minimize splashing to avoid oxidation.
9. Wine may be bottled when clear. Grape wines may benefit from a month of chilling (45-50 F) before bottling. **Ascorbic Acid** (antioxidant) may be added at bottling for white wines.
10. **Wine may be sweetened**, if too dry, by adding ½ tsp. of **Sorbistat-K (stabilizer) PLUS 1/2 Campden Tablet** /gallon of wine, and adding sugar syrup (2 parts sugar to 1 part water), wait 10 days, rack, then bottle. Note: If your wine is too lightly flavored we carry 4 oz. natural extracts to add.
11. Wine is now aged till ready. Average: 3-6 Mo. for whites; 6-12 months for reds. Suit your own taste. Drink when good!
12. You can be more accurate with your measurements by using these instruments: **Hydrometer** for sugar and alcohol levels, **Acid Titration Kit** for acid levels, and **SO2 Titration Kit** for sulfite levels.

# The Wine & Hop Shop

## Winemaking Techniques & Tips

1. The amount of fruit the recipes on the other side call for per gallon are averages. Wines can be made more intense in flavor by adding more fruit and less water for each gallon. Too much or too little fruit, however, can make a wine unpalatable. If more fruit is added changes must be made in the amount of Acid blend used.
2. Pectic enzyme helps prevent cloudiness by removing pectin in juices. The sooner used the more effective.
3. Yeast nutrient supplies minerals so the yeast can ferment well. Use **energizer** for hard to ferment wines: elderberry, cranberry, mead, flower wines, and any other wines that have little of their own fruit juice.
4. Most fruit makes the best wine when it is picked at its peak of ripeness. Do not use spoiled fruit.
5. Prevent vinegar forming by using clean fruit, keeping fermentors covered and Secondary fermentors full.
6. Sulfite (Campden tablets) is used to control bacteria, sterilize equipment and help prevent oxidation.
7. Common cork sizes used: # 7 - for champagne bottles; # 8 - for screwcaps; # 9 - for regular wine bottles. However, when using the smaller plastic or wooden corks, do not try # 9 corks; they are too large. The metal corks will accept all three sizes of straight wine corks. **Soak corks before using: 2 hours in hot water, or 8 in cold.**
8. One Campden tablet = 1/8th tsp. of Sulfite powder. BiSulfite and Metabisulfite are essentially the same.
9. 13-14 lbs. of a juicy fruit like grapes will give 1 gallon of pure juice, well squeezed. Apples may require 18 lbs.
10. **Mitchell Vineyard**, Oregon, WI (18 miles S. of Madison) sells **Pick-Your-Own grapes** for winemakers in the Fall. 7 varieties of grapes are available for wines. Included are Red and White French-Hybrid grapes.
11. **Wine concentrates** are also an option for making wine. There are many varieties of concentrates available from California to produce red, white and rose wines. Varietals such as Cabernet Sauvignon, Pinot Noir, Sauvignon Blanc, Riesling, Pinot Chardonnay and others are kept in stock. For a complete listing consult the Shop's Catalog. Concentrates are a good way to be able to make wine year round.
12. **Help, My Wine Won't Start** Here, all you can do is try to go down a check list and see if you can pinpoint the problem, or go to step 13. The checklist: **A.** Did the juice you use have a preservative in it—Potassium Sorbate, or another? If anything but Sulfite, it probably won't start. **B.** Is the yeast too old, or did you kill the yeast by having the re-hydration water too hot? Much above 105F-109F can kill yeast. **C.** Is the temperature of fermentation too cold? Some yeasts won't ferment much below 60F. **D.** did you add **too much Sulfite** either in powder form or as Campden Tablets? Much more than 1—1.5 tablets/gal of intended wine or more than 1/8 Teaspoon of powder/gal may inhibit yeast growth. If too much, stir vigorously until sulfite smell goes away, then proceed to Step 13.
13. **Stuck Wines or Wines that Won't Start:** Take 1/2 pint of wine or juice, add 1/2 pint of water, bring to a boil, cool to room temperature, then add yeast, keep warm at 70F. till fermentation begins. Then add this to 1 pint of wine or juice. When this quart is fermenting either add to the total batch of wine or double again. However, before you go through all of this, make sure you have a problem. If your wine is out of sugar, it can't ferment. So before you think it is stuck, make sure there is sugar to ferment. Often, winemakers will think the wine is stuck, when it's already through fermenting. Check by taste or hydrometer to see if there is sugar.
13. Sugar and alcohol levels are accurately determined by a hydrometer, acid levels by a Titration Kit, SO<sub>2</sub> levels by a Sulfite Titration Kit. All are available at the Wine & Hop Shop, and we can show you how to use them.
14. **Potassium Metabisulfite.** ¼ tsp/5 gal. = 50 parts per million (ppm); 1 t = 6.3 g. For most winemakers the most important addition they can make to wine is Potassium Metabisulfite, though care must be taken to not over add it. Care should be taken to ensure accurate amounts. Generally ¼ tsp/5 gallons of the powder added initially, then at every other racking, and again at bottling will protect the wine from bacteria and oxidation. More information can be found in wine books. Home Winemaking Step by Step by Jon Iverson has some good discussions on sulfite.

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