

## Making **White** Wine from Fresh Grapes

Basic Supplies checklist from Curds and Wine



**Reference: 100 lbs grapes = 6-8 gallons finished wine**

Supplies listed in **bold purple** are for sale at Curds and Wine

### REFERENCES

- **The Winemakers Answer Book by Alison Crowe** – A must-have for all of your questions during harvest and crush
- **Techniques in Home Winemaking by Daniel Pambianchi** – most comprehensive guide to making wine from fresh grapes or concentrate
- **The Way to Make Wine by Sheridan Warrick** – Step by step guide to making wine from fresh grapes

### EQUIPMENT

- **Refractometer** (if growing grapes only; do NOT use after fermentation initiated to check brix!)
- Manual Crusher or Motorized Crusher/destemmer
- Wine press: basket press fine for 50-200 lbs grapes; bladder press for 100 lbs or more grapes
- Primary fermentor: food grade container or carboy
  - 50-100 pounds of grapes: **7.9 gallon fermenting bucket** or **6 gallon carboy**
  - 200 pounds or more of grapes: multiple 32 gallon brute trash cans, or open pick bins
- **Hydrometer**
- **Floating thermometer**
- **Auto-siphon and tubing**
- **Wine thief**
- **Wine pump** if using large volumes > 6 gallons
- **Secondary containers:**
  - At least one **6-gallon carboy** and **bung/airlock** per 100 lbs grapes
  - Will probably need **½ or 1 gallon jugs**, might need **3 or 5 gallon carboys**
  - Variable capacity stainless steel tanks and assorted Hungarian barrels also available for large volumes
- **pH strips** or **pH meter**; pH meter available for free testing at Curds and Wine

### INGREDIENTS

- Dry ice – get at most grocery stores, usually need to call meat or fish department, or Praxair/CO<sub>2</sub> Cool (Miramar road), or can use frozen jugs of water
- **Easy clean** for cleaning/sanitizing or **Star-San** for sanitizing only
- **Pectic Enzyme** (1 tsp/10 lbs)
- **Opti-White** (1.9 g/gallon)
- **Lallzyme EX-V** (1 g/100 lbs)
- **Yeast:** extensive list available at <http://www.curdsandwine.com/Yeasts>; 5 g/100 lbs or 5-6 gallons juice
- **Yeast nutrient** (1 tsp/gallon) or **Go-Ferm** (1.25-1.5 g/100 lbs) and **Fermaid K** (5 g/100 lbs)
- **TA quick tests** (optional; TA analysis run at Curds and Wine for \$15/sample, need at least 10 mls)
- **Malic acid quick tests** if doing malolactic fermentation; also **Malolactic bacteria** (2.5 g for 5-20 gallons wine) and **Opti-Malo nutrient** or **ML Red Boost** (5 g/5-6 gallons wine)
- **Potassium metabisulfite** (1 pound bag)
- **Tartaric acid** (typically small additions, 2 oz jar or 1 lb bag won't go bad)
- **Oak dust, chips, and/or cubes** (Hungarian, French, and American available in medium, “house”, or heavy toast)
- **Rice Hulls** (1 pound per 100 pounds of grapes)

## **White Wine Making checklist for processing 100 pounds of grapes**

### Day 1:

- Crush and destem grapes then press, or press whole clusters; bladder press 25-30 psi, will need to press twice; add rice hulls to improve yield or if volume not enough to fill press
- Add 1/4 tsp Potassium metabisulfite (KMS) and dissolve in small volume water; stir into must
- Check brix/SG, TA and/or pH
- Add pectin enzyme or Lallzyme EX-V (one or the other), and Opti-White (in addition, optional)
- Let sit overnight with dry ice (~5 lbs per 6 gallons) or frozen jug(s) of water to keep cold, around 55-70° F to settle out

### Day 2:

- Siphon or pump clear juice off of gross lees into fresh container for fermentation
- Activate 5 grams yeast in 50 mls of warm (104° F) filtered water for 15 - 30 minutes with 6.25 g Go-Ferm Protect
- Add ½ cup grape juice and stir; let sit for 10 minutes
- Stir into juice

Day 3: \* Option 1 for malolactic fermentation (MLF): add malolactic bacteria [coinoculation; option 2 is to add after fermentation finished and wine pressed, see below]; no additional nutrients necessary if adding now - *MLF is optional for white wines, not typically done*

→ check brix daily until brix = 0

- Rack again into a clean carboy, off of fine lees; if coinoculated MLF, test malic acid levels now
- Top carboy close to base of neck, but leave some space for volume expansion and stirring with paddle if doing MLF
- \*Malolactic fermentation (MLF) option 2 (if did not coinoculate) – *MLF is optional for white wines, not typically done:*
  - o Rehydrate malolactic bacteria (MLB) if powdered form; not required for White Labs MLB
  - o Rehydrate Opti-malo plus nutrient separately
  - o Stir in
- \* Stir gently once a week to encourage MLF

→ after ~3 weeks of MLF check lactic and malic acid levels

MLF is complete when malic acid is gone– using quick tests, color will be white, not purple  
Continue stirring every week until MLF is complete

→ when MLF is complete **or if not doing MLF**, add ¼ tsp potassium metabisulfite (KMS), check pH and/or TA and taste; adjust all variables as necessary.

→ **Clarify wine:** add 2 tsp bentonite directly to wine and leave in 2-6 weeks, rack off when wine mostly if not completely clear.

Add oak if desired for 6-8 weeks. Rack off of oak after desired oak flavor is achieved.

→ **Cold stabilize wine:** Hold wine as close to freezing as possible (32° F; 40° F acceptable) for at least 2 weeks to encourage precipitation of tartrate crystals.

→ Test, taste, and rack wine every 6 - 8 weeks

- Test: free SO<sub>2</sub>; TA and/or pH
- Add ¼ tsp KMS per 5-6 gallons wine at each rack to keep free SO<sub>2</sub> 25-50 ppm
- If adjusting acids, do bench trials with small samples and taste first before adjusting entire batch

→ After 4-6 months, prepare to bottle

- Check if additional fining/clarifying agents need to be added from clarity, taste
- Adjust final pH and/or TA to taste
- Adjust SO<sub>2</sub> for bottling

