Making Wine from Fresh Grapes
Basic Supplies checklist from Curds and Wine

Reference: 100 lbs grapes = 10 gallons must = 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
- Primary fermentor: food grade container, must be bigger than the expected volume of must.
    - 50-100 pounds of grapes: **10 or 20 gallon fermenting bucket**, 2 x **7.9 gallon fermenting buckets**, 20 gallon Brute trash can (gray or white is food grade; green and yellow are not)
    - 200 pounds or more of grapes: multiple 32 gallon brute trash cans, or open pick bins
- **Paddle or punch** for red grape fermentation
- **Hydrometer**
- **Floating thermometer**
- **Auto-siphon and tubing**
- **Wine thief**
- **Wine pump**
- **Secondary containers:**
    - At least one **6-gallon carboy** (plastic or glass) 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
- **pH strips** (not useful for red wines) or **pH meter**; pH meter available for free testing at Curds and Wine
- Wine press: basket press fine for 50-200 lbs grapes; bladder press for 100 lbs or more grapes

INGREDIENTS

- Dry ice or frozen jugs of water
- **Easy clean** for cleaning/sanitizing or **Star-San** for sanitizing only
- **Pectic Enzyme** (1 tsp/10 lbs)
- **Opti-Red** (15 g/100 lbs)
- **Lallzyme EX-V** (1 g/100 lbs)
- **Yeast**: extensive list available at http://www.curdsandwine.com/Yeasts; 5 g/100 lbs
- **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**
- **Potassium metabisulfite** (1 pound bag)
- **Tartaric acid** (typically small additions, 2 oz jar or 1 lb bag won't go bad)
- **Malolactic bacteria** (2.5 g for 5-20 gallons wine) and **Opti-Malo nutrient** or **ML Red Boost** (5 g/5-6 gallons wine)
- **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)

Red Wine Making checklist for processing 100 pounds of grapes

* Grapes should be at brix 21-24, pH 3.5-3.7 for red grapes or 3.2-3.4 for white grapes or rosé style reds

Day 1:

- Crush and destem grapes from 100 lbs grapes
- Add 1/4 tsp Potassium metabisulfite (KMS) to must
- Check brix/SG; TA and/or pH: take out sample, pulse in food processor, strain out solids before testing
- Add pectin enzyme or Lallzyme EX-V (one or the other), and Opti-Red (in addition, optional)
- Let sit overnight with dry ice - 5 pounds per 100 pounds of grapes or frozen jug(s) of water to keep cold, ~50-60° F

Day 2:

- 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 must

Day 3:

- Check brix
- Punch down cap 2-3 times

* Option 1 for malolactic fermentation (MLF): add malolactic bacteria (MLB) [coinoculation; option 2 is to add after fermentation finished and wine pressed, see below]; no additional nutrients necessary if adding MLB now

Day 4:

- Check brix
- Punch down cap 2-3 times

Day 5:

- Check brix; if brix down 2/3 from start (~10 brix), add Fermaid K
- Punch down cap 2-3 times

→ continue until brix = 0. Keep must covered with plastic wrap and purge airspace on top with CO_2 if available until ready to press

Press Wine

- Can press wine if 5 brix or less, fermentation will finish in carboy after pressing; add rice hulls to improve yield or if volume not enough to fill press
- Press into buckets or Brute food grade cans, cover top with plastic wrap directly on top of wine; let settle overnight

Day after press:

- Rack into a clean carboy, off of gross 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 during MLF
- *Option 2 MLF (if did not coinoculate):
    - Rehydrate malolactic bacteria (MLB) if powdered form; not required for White Labs MLB
    - Rehydrate Opti-malo plus nutrient separately
    - 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, check pH and/or TA, and free SO_2 levels and taste; adjust variables as necessary to taste

- Rack into another clean carboy
- Adjust SO_2 to 30-50 ppm
- Add oak if desired

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

- Test: free SO_2; TA and/or pH
- Add ¼ tsp KMS per 5-6 gallons wine at each rack to keep free SO_2 25-50 ppm
- If adjusting acids, do bench trials with small samples and taste first before adjusting entire batch
- Rack off of oak after desired oak flavor is achieved

→ After 6-12 months, prepare to bottle

- Check if fining/clarifying agents need to be added from clarity, taste
- Adjust final pH and/or TA to taste
- Adjust SO_2 for bottling 30-50 ppm