

Making Wine from Frozen Must
Based on notes from Joe Palla, January 2011

- Start by thawing must, called cold maceration. Stir contents thoroughly while thawing. Draw off a quart or so of strained juice and make a yeast starter (juice plus yeast and a small amount of nutrient). Place in small food-grade container, warm to 60-65° F. Hydrate Go-Ferm at 104° F. Add yeast, wait 20 minutes, then add to starter. Starter should show visible signs of fermentation in 6 to 8 hours.
- When remainder of must is thawed, and warmed to 50-55° F, add starter, making sure must and starter are within 18° F of each other, to minimize the stress of sudden temperature change on the yeast.
- When fermentation is visible, add Fermaid K (yeast nutrient) at 1 gram / Gallon.
- On the following day, add pectic enzyme.
- Punch cap down at least three times a day. Stir the yeast at the bottom of the fermenter back up into suspension. You are looking for the must to become pink and creamy.
- When the sugar level is down to 5° Brix, press the must. Transfer the juice into a carboy. If possible, keep “free run” juice separate from pressed juice.
- After 24 to 48 hours, rack off of gross lees to avoid off flavors, aromas and other potential problems. If you are going to do malo-lactic fermentation, now is the time to start it. If not, make sure the carboy is fully topped-up.
- When malo-lactic is complete, rack off lees again and add 45 ppm SO₂.
- Rack every 2-3 months. Monitor by taste. You will lose 10 ppm SO₂ at each racking, so adjust as necessary.
- When wine is clear enough to bottle, rack one last time and add another 45 ppm SO₂.

Suggested Additives:

Potassium meta-bisulfite (SO₂) – ¼ tsp per carboy should yield approximately 45 ppm.

Tartaric acid for acid adjustment. 1 tsp = 5 grams

GoFerm (yeast hydration nutrient) - Hydrate at 104° F, add yeast, wait 20 minutes

Fermaid K (yeast fermentation nutrient) – 1 gram / Gallon

Pectic enzyme – breaks down pectins which can cause haziness

Tannin VR-Supra -- add in first 3 days of fermentation to improve mid-palate structure

Oak Cubes – use about 2.5 oz per carboy

Staves – leave in carboy at least 3 months

Suggested Yeast and Malo-lactic Strains:

Pasteur Red yeast: Cabernet Sauvignon, Merlot, Zinfandel

Lalvin RC-212: Pinot Noir, Rhone varietals

Malo-lactic: Wyeast liquid culture; Lalvin Bacchus dry powder