

Basic steps for vinifying 100 lbs of red grapes in good condition

When	Status	What to add or do
Start of cold soak	REQ	30-50 ppm SO ₂ —try to keep must 10°C or below
	RMD	3 ml Color Pro or 5 g pectic enzyme
+ 8 hours	RMD	6-12 g VR Supra or 50 grams oak dust
	OPT	Add yeast if temperature okay and you are cooling for the cold soak
For 3-5 days	RMD	Stir twice a day
Yeast fermentation	REQ	Bring must temperature to about 20°C; make sure fermenter can breath
	REQ	Adjust Brix to 22.5 to 25:—1L water will reduce Brix 1° (do it now); 300 g sugar will increase Brix 1° (calculate addition now but add near end of fermentation)
	REQ	Adjust (usually increase) acid to between 6.5 to 7.5—perhaps more if required to bring pH down to 3.5; 25 g tartaric acid will increase TA 1 point
	REQ	5-10 g D254 or RC212 yeast reconstituted with Go-Ferm (1.1 g Go-Ferm per gram of yeast)—high sugar levels benefit from more yeast
	OPT	11 g or less Opti-Red
Every few hours after cap forms	REQ	Punch down cap
1/3 sugar completion	REQ	6 g Fermaid K
	RMD	Aerate, rack and return (delestage)
½ sugar completion	RMD	2- 4 g DAP or Fermaid K (DAP carries more nitrogen than Fermaid K)
	RMD	Aerate, rack and return (delestage)
	OPT	Remove some seeds
Excessive H ₂ S	REQ	Small additions of Fermaid K or DAP with aeration
2/3 sugar completion	REQ	Perhaps add 2 g Fermaid K or DAP for high-nutrient requiring yeasts (e.g., BM45). Henceforth, no more nutrient additions.
	RMD	Aerate, rack and return (delestage)—last time
	OPT	Remove more seeds
SG 1.005 -1.001	RMD	Press off juice; move to closed container; add sugar now (if necessary)
12-24 hours after ferment quiets down	REQ	Rack off gross lees to carboy or barrel
24-48 hours after ferment quiets down	RMD	If H ₂ S evident—splash rack; consider CUSO ₄ addition. Do not over-rack or over-expose to air. Maintain a light lees.
ML fermentation	REQ	Wine should be at room temperature
Immediately or up to a few weeks later	REQ	Add ML culture—stirring probably not necessary as long as lees is light and no more than ¾ inch deep
3 weeks to 6 months later	REQ	Watch for end of MLF (end of small CO ₂ bubbles); test for completion if possible
End of MLF	REQ	Test SO ₂ —ensure 30 ppm free SO ₂ (or more if pH is above 3.5)
3-12 months bulk aging	RMD	Continue to age on light lees in barrel or in contact with oak chips
	RMD	Rack once or twice to clarify—add 10 ppm SO ₂ with rackings if your protection level is unknown
	OPT	Add tannin (e.g., Tan'Cor Grand Cru) for structure and protection
Prior to bottling	OPT	Cold stabilization; protein fining for tannin; filtration
In bottle	RMD	Age 3 months to many years in bottle

NOTE: Never make additions (except oak powder) directly to wine; always dissolve in water first.
 REQ=Required; RMD=Recommended; OPT=Optional