

Yields Appx. 680-695 Liters

Day 1-7: Primary Fermentation

Date: _____ S.G. _____

- Clean primary fermenter and other process equipment with sanitizing solution. Rinse well with water.
- Add about 10 liters warm water to the primary fermenter. **Pour the contents of the Bentonite pack into the primary fermenter and stir well.**
- Sanitize the top opening of drum including bag/ cap containing the juice concentrate. Remove cap or cut bag to insert transfer hose. Transfer base concentrate from drum into primary fermenter. **DO NOT ADD FLAVORING AT THIS TIME.**
- Rinse bag with about 12 liters (3 US gallons) hot water. Add to primary fermenter.
- Fill primary fermenter to desired level of volume with cool water (Approximately 545 Liters of water in total) to reach a specific gravity of 1.070. Final volume of reconstituted liquid should be 680 Liters total. Check S.G. frequently while making water additions to ensure proper starting gravity/reconstitution.

Approximate Dilution

| Base Concentrate | Water Addition | Resulting S.G./Brix & total Volume |
|------------------|----------------|------------------------------------|
| 135 Liters | 545 Liters | 1.070 SG/17 BX @ 680 Liters |

Stir vigorously or re-circulate juice with pump for at least 15 - 30 minutes to mix the concentrate and water evenly, providing the yeast with oxygen for healthy fermentation

- Check Specific Gravity. Starting S.G. should be approximately 1.070. If above 1.070, continue to stir to ensure complete reconstitution, wait 15 minutes and check Specific Gravity again.
- Yeast Rehydration & Inoculation:** Provided with your drum is **Enartis EZ-Ferm 4X4** Active Dry Yeast (Dosage Rate is 40 grams per hectoliter or 275 grams per fruit wine drum).
- Rehydration:** Proper Rehydration of Active Dry Yeast (ADY) is critical in obtaining optimum yeast viability. Disperse yeast in 40°C (105°F) water, at an addition rate of 1lb. yeast to ¼ - 1 gallon water (1kg to 2gal). Water Temperature is critical- lower temperatures cause leaching of cell constituents and reduce viability. Let stand 5 to 15 minutes (NEVER MORE THAN 30 MINUTES IN WATER). Water is preferable to juice for rehydration. The yeast cell membrane is very fragile until it is rehydrated and will allow liquid to pass through.
- Inoculating:** After rehydration, mix yeast suspension and juice to be fermented until temperature is adjusted to 15 - 20°C (59 - 68°F). This will help avoid damage to the yeast by temperature shock. Add temperature adjusted **yeast suspension to juice or must.**
- Cover primary fermenter and leave for 7 -10 days to ferment. Preferred temperature range for good fermentation is 20 - 24°C (68 - 75°F). Avoid ambient room temperatures above 25°C (77°F).

Day 8-17: Secondary Fermentation

Date: _____ S.G. _____

- Check Specific Gravity- It should be at 1.005 or lower.
- Sanitize the secondary fermenter & racking equipment. Rinse well with warm water.
- Transfer the wine into the secondary fermenter, being careful not to disturb sediments. Leave sediment behind and discard.
- Attach fermentation airlock to the secondary fermenter.
- Leave the wine to complete fermentation for another 6 days.

Day 18-19: Stabilizing & Clearing

Date: _____ S.G. _____

- Taste the wine for dryness. Specific Gravity reading will be approximately .995 and all fermentation activity should be complete.
- Transfer the wine off gross lees into sanitized tank/vessel.
- 1st SULPHITE ADDITION: Test wine for SO2 level with appropriate testing device and calculate addition rate to raise free SO2 to 25 - 35 ppm. You may wish to use an online sulphite calculator at www.fermsoft.com** Once you have calculated the addition rate, dissolve the sulphite powder using approximately 500 - 1000 mL of cold water and stir to dissolve. Add sulphite solution to the wine and mix thoroughly.
- SORBATE ADDITION:** Add SORBATE pack to a small amount of water. Add sorbate solution to wine and mix. Stir vigorously for at least 20 -30 minutes to remove all CO2 gas.
- CLARIFIER ADDITION:** Add 250 mL of GELOCOLLE and gently mix for 20 minutes. Leave the wine to clear for 3-5 days.

Day 20-27: Fruit Flavor & Clearing

- Transfer the wine into a clean tank/vessel, being careful not to disturb Lees/sediment. Leave Lees/sediment behind and discard.
- FLAVORING ADDITION:** Remove Approximately 30 liters of wine. Sanitize flavor bag and cap. Add the contents of fruit flavoring bags to the wine.
- 2nd CLARIFIER ADDITION:** The HotMix Sparkolloid clearing agent solution must now be prepared. Prepare a solution of 1.5L of hot water and 1.5L of wine in a microwavable or heat resistant container. Add contents of Hot Mix Sparkolloid packet into water wine mixture and stir. Stir and heat the solution until liquid boils (avoid foam over). Remove from heat and stir occasionally for 5 minutes. Pour the hot Sparkolloid solution into the wine. Stir gently for 10 minutes. **Sparkolloid must be brought to a complete boil to activate ingredient.**
- 3rd CLARIFIER ADDITION:** After 1 hour add 250 mL of GELOCOLLE and gently mix for 10 minutes. Top up tank/ vessel to minimize head space with water or similar wine. Seal the tank/vessel and attach airlock. Age the wine for 7 -10 days.

Day 28: Filtering/Bottling

- Rack and Filter the wine off Lees into a clean vessel before bottling. Filtering is recommended as it will improve appearance and flavor.
- Bottling: Ensure wine is clear and suitable for bottling by tasting and performing appropriate QC analysis.** Check to ensure free SO2 levels are at least 25 - 35 ppm and make any necessary SO2 additions. Clean & sanitize wine bottles. Rinse well with water. Fill bottles leaving about 2.5cm of space between the bottom level of the cork and the wine. Use a corker to insert dry corks. Leave the bottles to stand upright for 3 days, then place the bottles on their sides to keep the corks moist.

Tips: All equipment should be spotlessly clean and sanitized before coming in contact with wine. Prevent air from spoiling your wine after fermentation. Regularly check and adjust SO2 levels. Keep tanks/vessels topped and fermentation locks attached and filled with water or similar wine. Properly evaluate your wine prior to bottling.