

# makewine.co.nz

## **Making Wine From Winemaking Grapes**

### **Potassium Metabisulphite Instructions**

- Please store your ingredients in the fridge.
- Here at makewine.co.nz we hope you will love making & enjoying your own homemade wine as much as we do!
- Your ingredients include unlimited email support so any questions or problems please contact us at [info@makewine.co.nz](mailto:info@makewine.co.nz). Our policy is the only silly question is one you don't ask!

## **Before You Start:**

### ***Assemble the Equipment You Will Need:***

- Something to crush grapes or to juice them (potato masher is fine for small quantities)
- Food grade bucket with airtight lid
- Secondary fermentation vessel (ideally glass jar / carboy but you can use a bucket)
- Bored rubber bung for carboy or grommet for bucket
- Hydrometer
- Airlock
- Food-grade siphon tubing
- Muslin or nylon straining bag
- A way to press your grapes if fermenting on the skins (can be done by hand for small quantities)
- Plastic measuring spoons
- Plastic long handled serving type spoon
- Plastic or glass measuring jug
- Funnel
- Ideally kitchen scales
- Bottles & a way to seal the bottles (Pg 6)

### ***Source Your Ingredients:***

- About 8kgs of vine-ripened winemaking grapes per 5 litres of finished wine
- Depending on sugar content of your grapes & whether you are making a dry or sweet wine you may need some sugar

### ***Hints & Tips:***

- Cleanliness is everything. Always wash your hands thoroughly & sterilise ALL your equipment including things like your muslin/straining bag, siphon tube & stirring spoons.
- This book is merely a suggested method & recipe which is tried & tested but it is not the only method that will work. Winemaking is all about experimentation, so don't be afraid to try out different things.
- If you have a recipe which calls for different timeframes & quantities, please follow your own recipe.
- Winemaking is also a bit like cooking, you may "taste & correct" like you would with seasoning a dish eg adding more acid or tannin.
- Up to you whether/how long you mature your wine. You will find that your wine may develop more complexity & mellowness with time.
- Experiment as to what suits you the best. That is all part of the magic of making your own wine!
- There is additional information at [www.makewine.co.nz](http://www.makewine.co.nz)
- HAVE FUN ☺

## Potassium Metabisulphite [PMS] Instructions

**Safety:** Don't inhale the powder or vapour. Use in a well ventilated area. Don't use it to sterilise metal or store in metal containers.

- Dissolve 50g in 500ml water to make a 10% solution. This will keep for months if you keep it tightly sealed. Use a glass or plastic container.
- Use 1 teaspoon of 10% solution to sterilise enough **must** for 1 gallon / 5 litres of wine
- Dilute the 10% solution down further. 1 part 10% solution to 4 parts water (eg 50mls 10% solution & 200mls water) for your sterilising solution for all your equipment.
- A small amount goes a long way. Swirl it around all your containers etc so it touches each surface several times. Then leave it for at least 20 minutes (with lid on) to complete sterilisation.
- Bottles, containers etc can be kept sterilised by storing them with 2cm+ of solution in the bottom.
- Tip out solution & shake them out well before using them.
- The solution can be reused until it stops emitting the obvious vapour.
- Here at makewine.co.nz we keep all our equipment (except metal or rubber) in a bucket with sterilising solution, so it is ready to go at a moment's notice. The items don't need to be covered with it as the vapour is what keeps the items sterilised.

## Generic Recipe / Instructions

There are 2 broad methods for extraction/primary fermentation.

A/ Juice the grapes (by crushing or juicing) & ferment just the juice (not suitable for red wines as the colour comes from the skin);

B/ Crush the grapes & do the primary fermentation on the skins. The longer you leave the fermentation on the skins happening the more colour & tannin will be extracted.

### ***Day 1 (preparation & extraction)***

- Wash grapes, remove stems & any unsound/unripe grapes.
- Crush or juice your grapes (depending on the style of wine).
- Stir in 1 teaspoon 10% PMS solution & 5g pectolase/5L finished wine.
- Put the lid on & leave 12-24 hours.
- This mixture is what you call "must".

### ***Day 2 (primary fermentation)***

- Take yeast out of the fridge to bring it to room temperature.
- Measure the SG. For hydrometer instructions you can visit [makewine.co.nz](http://makewine.co.nz) & go to the "About Us" tab.
- If you are doing your primary fermentation on the skins you will need to strain some of the must to test the SG.
- If the SG is less than 1.075, you will need to add some sugar to make it up to at least 1.075 (more if you require a wine of greater than 10% alcohol.)
- Rehydrate your yeast. Add 6g GO-FERM® Protect to 50mls cooled boiled water, then add 5g yeast. Stir gently & let it sit for 20 mins. Initially the yeast & nutrient will clump, don't worry about this, it will even out as it rehydrates.
- If you are using nutrient salts instead of GO-FERM® Protect & Fermaid A, add them now in accordance with manufacturer's instructions.
- Stir in the rehydrated yeast, don't worry if the yeast mixture is still a little lumpy.
- Put the lid on your must.

### ***Days 3 onwards (primary fermentation)***

- Depending on the result you want you can leave your wine in primary fermentation for 3-14 days.
- Within 24 hours your must (if not contact us for advice- ideally send a photo) should be showing signs of fermentation. It will be bubbly, & if you are fermenting on the skins, the pulp will be breaking down & the pulp will be pushed to the top in a "cap" or "crust".
- Stir twice daily (keep the lid on in between times).

### ***Day 5 Fermaid A***

- After 3 days of primary fermentation dissolve 1.5g of Fermaid A/5L of finished wine in a small amount of cooled boiled water & stir in to the must.

### ***Straining & secondary fermentation***

- Once your wine has been in primary fermentation for as long as you desire, you can:
  - Rack into secondary press your wine into the secondary fermentation vessel if you have fermented the juice only in the primary fermentation
  - Press your grapes to extract the juice if you are fermenting on the skin. This can be done by hand if you are only fermenting small quantities.
- You may also need to strain, if you are using muslin or a small bag, put your muslin inside a sieve or colander for ease of use.

- Pour the must in your carboy (or other fermentation vessel).
- If you have some must in excess retain it in the fridge with a very loosely capped lid (to avoid it exploding). This will be useful for topping up after racking etc
- Leave a gap of about 10cm initially in case the must foams. Once the fermentation has calmed down you can top it up to no more than 3cm between your wine & your bung.
- Pour a small amount of PMS solution in your airlock & insert the airlock in the bung or grommet.
- Take an SG reading. If the SG is above 1.000 your wine is still fermenting and within 24 hrs you will see bubbles through the airlock.
- If you do not see bubbles check [makewine.co.nz](http://makewine.co.nz) website under the Info tab & go to Stuck Ferments.

### **Medium or Sweet Wine**

1/ Use yeast which dies off at a certain alcohol % (Lalvin 71B will die off at 14%). If your wine still has sugar in it, that sugar will remain as residual sugar & your wine will be semi-sweet or sweet. Add the extra sugar near the end of the fermentation to taste. Start with an extra 100-200g per 5 litres of wine.

2/ Or don't let your wine ferment out completely. Taste it daily once it goes in to secondary fermentation, once it has reached the level of sweetness you like; add a teaspoon of 10% PMS solution & 1/4 teaspoon of potassium sorbate per 5 litres of wine. This will stop your yeast fermenting; & your wine will remain sweet.

3/ Some people use artificial sweeteners to make medium or sweet wine, but these can leave an aftertaste.

### ***Within 1-4 Weeks (racking, storage, bottling)***

- In 1-4 weeks the bubbles will stop.
- Your wine should be clear, or starting to clear at this time.
- You can decide whether you would like to bottle it now or siphon it off the sediment (racking) & allow it to mature.
- You can also decide to use finings if your wine isn't as clear as you'd like & you want to speed up the clearing process.
- You can also decide if you would like any other additives like oak or tannin.

### **Siphoning Instructions:**

- Put your vessel to be siphoned up higher than the other vessel eg on the bench
- Prop it on a lean with a cloth or similar, making sure it is still secure.
- Put your other vessel on the ground
- Fill your siphon tube up with cooled boiled water
- Put a clean finger over each end of the siphon tube
- Put one end of the siphon tube in your vessel to be drained, being careful to avoid the sediment at the bottom.
- Then put the other end of the siphon tube in the vessel to be filled.
- Watch while gravity & pressure do their job & siphon your wine from one vessel to the other, keeping the end of the siphon tube away from the sediment, but as close to it as possible so as to avoid getting air in the siphon tube (air in the tube will stop the siphoning process).

### **To bottle the wine (still wine)**

- Add 1 teaspoon of 10% PMS solution per 5 litres of must. (Not necessary if you will only be storing the wine for a short time & you want to minimise the preservatives in your wine).
- Siphon your wine into sterilised bottles (or siphon in to another vessel then pour in to your bottles using a funnel).
- Each bottle should be about 2.5cm from the lid/cork of the bottle.

### **To bottle the wine (sparkling wine)**

- Ensure you made your wine with champagne yeast.
- Dissolve 75g sugar in a little boiling water & leave to cool.
- Siphon the wine off the sediment in to another carboy or vessel.
- Add the cooled sugar syrup
- Shake / mix through thoroughly.
- Siphon or pour into bottles suitable for pressurised containment.
- Each bottle should be about 2.5cm from the lid/cork of the bottle.

### **To mature the wine**

- “Rack” it by siphoning into another carboy, leaving behind the lees (sediment). Add 1 teaspoon of 10% PMS solution before racking to help protect the wine from oxidisation.
- Top it up with (ideally) reserved must or cooled boiled water after racking so that your wine is no more than 2cm below your bung.
- You may continue to rack the wine when you see sediment settling on the bottom of the carboy.

### **Bottling Options**

- Sparkling wine must be bottled in sparkling wine bottles (thicker to withstand the pressure) or PET bottles.
- For sparkling wine bottles use plastic push-in-by-hand stoppers & wire “cages” to hold down the corks.
- PET bottles can be used for short-term storage (used but sterilised softdrink bottles are fine if you don't mind the aesthetic).
- Glass screw top bottles also suitable for sparkling wine from [makewine.co.nz](http://makewine.co.nz).
- Flip-top bottles, some are made for pressure & some not.
- Ordinary bottles & standard corks; made from cork, plastic or a mix of both. Also needs a corker.
- Novatwist premium screwtops can be used on used wine bottles.
- Reuse used screwcap wine bottles for short-term storage.