

ABC
CRAFTED SERIES™

WHAT THE INSTRUCTIONS
DON'T ALWAYS TELL YOU

WINE FROM KITS



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INTRODUCTION

The magic and mystery of winemaking has intrigued and fascinated people for centuries. That magic and mystery can also scare the pants off of us.

Most wine kit instructions just don't have the room to give much more than the basic instructions. When we first started making wine kits ourselves, we were confused and frustrated by this lack of detail. There were some things we just didn't understand.

We found that most of the books about wine making were filled with fruit wine recipes and descriptions, they hardly mentioned wine kits, if at all. These books also expected you to be familiar with a lot of the winemaking terms, additives, and equipment.

When we started selling wine kits, we found that our customers were asking the same basic questions that we were. We decided to take those questions and answer them in a booklet that could be used in conjunction with the instructions from the wine kits.

After elaborating on the kit wine instructions, we decided to describe the basic equipment and how it was used. We then addressed questions about some of the ingredients that come with the kits. Next, we expanded into descriptions of filters, bottles and corks. That's how the book *Wines from Kits* – what the instructions don't tell you came into being.

The response to this book was overwhelmingly positive, but we realize that it needed a little more. The Second Edition as expanded on wine kit instructions to encompass not only the 4- week kits, but also 6-week kits and up to 23 litre juice kits: in other words, almost any kit on the market. We also re-vamped some of the descriptions and added a few pictures.

This Second Edition is still designed for both the beginner and those of you who have been making kit wines for a while. For the beginner, the book still doesn't expect you to be familiar with any of the terms. If you have been making kits for a while, hopefully you'll pick up a few tips and hints along the way.

Making your own wine can be a rewarding hobby. If you can ignore things, you can make wine. Clean the equipment, mix a few things together, and transfer the wine from one container to another. The rest of the time is pretty much spent ignoring it.

Then, what more personal gift could you give someone than something you made yourself, personalized with shrink caps and your choice or design of labels?

We don't profess to know everything about making wine. We just want to pass along some of things we've picked up along the way in the hopes that you have as much fun, success, and enjoyment from making wine as we have.

1.

THE EQUIPMENT

Wines made from kits require a minimal amount of specialized equipment. There are a number of “toys” that will make the job easier, but we’re mainly going to cover the basics.

PRIMARY FERMENTORS

The Primary Fermentor is usually a large bucket made from a food grade plastic. It should hold at least 26 litres and be marked at the 23-litre mark. Most wine kits make 23 litres, but you will need enough room between the top of the wine and the top of the bucket for all the foaming that’s going to happen during fermentation. That’s why we prefer a 27-litre primary.

Most home winemakers will use a plastic lid with a rubber gasket, fitted with an airlock, to cover the primary fermentor. Some lids come pre-bored; others have to be drilled to make a hole for the air lock.

You will notice a number of indentations, probably 8-10, around the edge of the lid. You will need to slice each of these indentations up from the bottom about a quarter inch or so with a knife or razor blade. If you don’t, you’re going to have a tough time getting the lid off the primary. What the slits do is allow you to slightly lift a section at a time and work the lid off. The rubber gasket still gives you a good seal.

Some people prefer to sanitize a new plastic bag or other piece of plastic and tie it loosely to the top of the primary.

Whichever method you use, you need to protect the wine from contamination from outside air, and still allow the fermentation gases to escape.

SECONDARY FERMENTORS

CARBOYS

The Secondary Fermentor is called a Carboy. The carboy is usually made of glass, although some are made from a food grade plastic.

There are several sizes of carboys, but for kit wines, you'll probably use a 23 litre one. For smaller batches of wine, use a smaller carboy. You want to keep the wine within 5 to 8 cm from the top of the carboy to minimize the risk of oxidation.

If you use a plastic carboy, make sure you use a separate one for beer, otherwise it will adversely affect the taste of your wine.

Plastic also deteriorates with age. Make sure you check your plastic carboy carefully before you use it. In addition, because plastic is porous, plastic carboys are not recommended for long term storage of wine. If you are going to keep wine in a carboy for several months, switch to glass.

AIR LOCKS

Air locks are also called fermentation locks.

While wine is fermenting, it gives off carbon dioxide (CO₂) gas. This gas production is usually pretty obvious during the first several days of active fermentation - - you can see it bubbling through the air lock. The gas must escape, or it could build up enough pressure to blow the lid off the primary and make a sticky mess in your wine-making area.

The air lock, which can come in a variety of shapes, is a one-way valve on a short piece of plastic tube. The tube is inserted into a hole in a bored or pierced rubber stopper. You don't need to jam the tube all the way through the stopper, just make sure it is well seated so it won't fall out. The stopper is then placed in the mouth of the carboy, or a hole in the lid of the primary.

Inside the fermentation lock is a small cavity or well. This cavity is half filled with a metabisulphite solution. Some people just use water, but we prefer to use metabisulphite to kill any organisms that might survive the water, and possibly contaminate the wine.

As long as carbon dioxide is being produced, it will bubble through the metabisulphite solution to escape; air cannot get in.

Some wines will have a vigorous fermentation; others will hardly make a bubble. We've made kits side-by-side where one bubbled so much it oozed out of the hole around the stopper, while the one right beside it never seemed to bubble at all. You must use your hydrometer to check whether or not your kit is "working".

If you left the primary fermentor uncovered, you would let the gas out, but air would get in. Oxygen can react with certain ingredients in the wine and affect its colour and flavour. Worse, an open primary can admit vinegar bacteria. These bacteria float in the air and some of them, sooner or later, will attack and contaminate any wine left exposed. Once infected with vinegar bacteria, the wine cannot be saved.

RACKING TUBES AND SIPHON HOSES

Racking tubes are rigid plastic tubes with a bend at the top to hook over the edge of the fermentor, and an anti-sediment cap at the bottom. This cap allows the racking tube to sit on top of the lees (the gunk on the bottom of your fermentor) so none of it transfers during racking.

Siphon hoses are made from food grade plastic tubing and are used to transfer (rack) the wine from one container to another. They should be between about 150cm and 180cm long (5 to 6 feet). To attach the hose to the racking tube, hold the end of the siphon hose under hot water to soften it, then push the hose on to the "short" end of the racking tube.

When you rack wine, you are using gravity, so the full container should be about a meter (2 to 3 feet) or so above the empty container. There are a couple of ways to start the siphon action. One method is to place the sterilized racking tube into the full container.

Put the end of the siphon hose in your mouth, suck to start the flow, then put the end of the hose into the empty container.

The second is to slowly run water into the siphon hose until the hose and racking tube are full of water. Fold over the last couple of inches of the hose to seal it. Now put the racking tube into the full container and release the hose into the empty container. Gravity should start the siphon action. You will not be adding enough water to make any difference to the wine.

One of the “toys” you can get is an autosiphon, which is a racking tube in a cylinder. You attach the siphon hose to the racking tube end and put the whole gizmo into the full container. When you pull up the racking tube push it back down, it works like a simple pump to start the siphon action. No more “sip and spit”.

Another handy gizmo is a racking tube holder. It sits in the neck of the carboy and holds the racking tube. This allows you to start your siphoning (racking) from the middle of the carboy, well away from the lees. You gradually lower the racking tube as the siphoning progresses, thus ensuring that less of the lees (gunk) gets transferred. You always rack the wine off the lees, as it can give off tastes and flavours to the finished wine.

VINOMETERS AND THERMOMETERS

The vinometer is a small instrument that can measure the alcohol content of a finished wine. If you forgot to take your initial hydro-meter reading, you won't be able to calculate the potential alcohol content, so this can help.

It can be fairly accurate for dry wines but tends to be less accurate with very sweet wines. It's not really a necessary piece of equipment but is a nice inexpensive “toy”.

Immersion thermometers are glass thermometers that are weighted at the bottom. They can float in the must (juice) and let you check the temperature at any time.

Stick-on thermometers are inexpensive and make checking temperatures much easier. Just peel the backing off the thermometer strip and attach it to the outside of your bucket or carboy. You should position the strip in the middle of the fermentor. These thermometers change colour to indicate the temperature. Once you get the hang of them, they're fairly easy to read.

Yeast, which is the key to successful wine making, flourishes within a narrow temperature range. If the temperature is too high, above 30 °C, it can kill the yeast. If it is too low, below about 20 °C, fermentation may not start.

During fermentation, yeast produces an exothermic reaction. In other words, as it works, it produces heat. If your room is warm enough for the yeast to start working, it is warm enough for it to keep working.

HYDROMETERS

The hydrometer is the most valuable piece of winemaking equipment. It is the only way to tell how fermentation is progressing. You cannot accurately judge fermentation just by looking at how fast the gas is bubbling through the air lock; some kits will bubble like crazy, and some won't seem to bubble at all. If you take readings during the primary fermentation, the S.G. (specific gravity) should fall steadily if all is going well.

If the S.G. refuses to drop to the required level, the fermentation is "stuck", and you will have to take steps to get it going again. If you are having problems with your wine kit, the first question the wine store should ask you is your hydrometer reading. Without the reading you cannot tell if fermentation is stuck or finished.

The hydrometer looks like a giant floating thermometer. It is a sealed glass tube with a weighted bulb at one end so that it floats upright in the wine. Inside the tube is a printed scale. Your hydrometer may have more than one scale. The one for the S.G. is the one with the "99" at the top.

The hydrometer must be held at eye level to get an accurate reading. You have to see where the surface of the wine cuts across the scale. You do this by taking a small sample of wine with a wine thief.

Some wine thief's allow you to drop the hydrometer inside then to take your readings; some require you to put the sample in a hydrometer test jar. What you are checking is the specific gravity of the wine, usually called the S.G.

If a liquid has the same density as water, its S.G. is 1.000. if it is denser than water, the S.G. will be more than 1.000. when you dissolve sugar in water, it becomes denser, so the hydrometer floats higher. (If you dissolve a lot of sugar, you get thick syrup).

Grape juice has sugar in it, so the S.G. will be greater than 1.000. pure grape juice has an S.G. will be greater than 1.000. pure grape juice has an S.G. of about 1.085; wine kits range from about 1.075 to about 1.085.

When you start your wine kit, take your initial hydrometer reading of the must. Must is the unfermented juice. Yeast cells break down sugar and turn it to alcohol and carbon dioxide. Because alcohol is less dense than water, the final S.G. will be less than 1.000. When the hydrometer reading falls to a fairly low figure and remains steady, you can be reasonably sure that the fermentation is finished. This final hydrometer reading should be between 0.995 and 0.990.

You can consult the specific gravity chart and instructions that come with your hydrometer to calculate the potential alcohol content of your finished wine.

CALCULATING POTENTIAL ALCOHOL

There are a number of methods you can use to calculate the potential alcohol of your wine. The method you choose to use will depend on which scales are found on your hydrometer. A Triple-Scale Hydrometer will have all three scales. Most hydrometers have at least the Specific Gravity scale; you need that one to assess how fermentation is progressing.

USING THE SPECIFIC GRAVITY SCALE

Take an initial reading; just before you add the yeast, and a final reading, after fermentation is complete, and before you add any sweetener.

Subtract the final S.G. reading from the initial S.G. reading and divide the result by 0.0074.

Initial Reading	1.070
Final Reading	0.995
Difference	0.075
$0.075 / 0.0074 = 10.15\%$	

USING THE POTENTIAL ALCOHOL SCALE

Take an initial reading, just before you add the yeast, and a final reading, after fermentation is complete, and before you add any sweetener.

Subtract the initial potential alcohol reading from the final reading and the difference is the approximate alcohol content.

USING THE BRIX OR BALLING SCALE

This method measures the percentage of sugar in the must. Take a reading, just before you add the yeast.

1 degree Brix equals 1 gram per 100ml, or 10 grams per litre. When you read a Brix, you divide by 2, then add 1 for the final per cent alcohol.

**SPOONS, PADDLES
AND BRUSHES**

A long handled plastic spoon is a great tool to stir ingredients into the wine and to degas the wine. Many spoons come with a small paddle at one end that will fit through the neck of the carboy.

Wooden spoons are not recommended because they are porous and cannot be adequately cleaned.

Some people prefer a plastic brewer's paddle, which has small holes or slots in it. They feel they get a better mixing action with this type of paddle than with a spoon.

Another handy tool is a brush. There are longer brushes for carboys, and shorter brushes for cleaning bottles. Most long carboy brushes will also fit into the wine bottles, so if you are as frugal as we are, one brush will do both jobs.

Wire-cored brushes can also be bent to scrub the "shoulders" of the carboy.

2.

STUFF IN (AND FOR) THE WINE KITS

Some wine kit manufactures just number their additive packages; others print the names of the ingredients on them.

Not all wine kits will use all of the additives described here. More experienced winemakers may start to experiment with their kits by using different ingredients, or by adding other ingredients that don't come with their kits.

SULPHITES

Sulphites are used both as sanitizing agents and as wine stabilizers. Both potassium and sodium metabisulphites are stable sources of sulphur dioxide (SO₂). Sulphites work by releasing free sulphur dioxide, which inhibits yeast, mould and bacterial growth. They do this by killing some of the organisms outright, and by interfering with the ability of the surviving organisms to reproduce.

Sulphites are also added directly to wine after the fermentation is complete. This is to help prevent oxidization, and to prevent the wine from spoiling. Oxidation in wine is kind of like what you see on the cut edge of an apple – the wine takes on a brownish colour and kind of “cardboardy” taste. Sulphur binds with the oxygen in the wine to help prevent this damage. Without sulphites, you’d have to drink your wine quickly before it spoiled, possibly within one or two months.

Sulphite solutions have a very pungent odour. If you’ve ever smelled ammonia, sulphite solutions can hit you with the same nasal impact, and they get stronger with age. People with breathing problems should avoid inhaling sulphite powder or the gas that comes off the prepared solution.

Once mixed, sulphite solution can be re-used up to 5 months or so before being discarded.

SODIUM AND POTASSIUM METABISULPHITE

Potassium metabisulphite is often interchangeable with sodium metabisulphite but tends to be more costly. Metabisulphites are a source of SO₂ (Sulphur Dioxide) in wine making.

To make a stabilizing solution, use ½ teaspoon in 23 litres to give 50 PPM. Dissolve the metabisulphites in a small amount of cold water or wine, then stir thoroughly into the wine. This will be one of the additive packets when you stabilize your wine kit.

To make a 2.5% sanitizing solution, dissolve 50g of metabisulphite in 4 litres of cold water. Most wine stores sell the metabisulphite in 50g packages. We prefer to keep our mixed sanitizing solution in a one-gallon glass jug with a screw cap. You could use a plastic one-gallon

container but be careful. One-gallon plastic containers look like milk jugs, you don't want to mistake one for the other.

You can use a spray bottle to apply your sanitizing solution to your equipment. Fill the spray bottle with the sanitizing solution and spray the entire surface of your buckets, lids, spoons and any other equipment that needs to be sanitized. Remember to rinse well.

These products are irritants. They can provoke allergic reactions in hypersensitive individuals. Individuals with asthma or emphysema should not breathe the dust or SO₂ (sulphur dioxide) gas from the prepared solution.

CAMPDEN TABLETS

Campden tablets are a source of SO₂ (sulphur dioxide) in wine making. They are made from compressed metabisulphite and can be either potassium or sodium.

These tablets are easy to use in fruit wine recipes because you just count tablets rather than measuring a powder. They are not usually recommended for wine kits because of the near impossibility of completely dissolving the tablets, which may result in an incorrect dosage. A better choice would be the powdered potassium or sodium metabisulphite.

I THINK I'M ALLERGIC TO SULPHITES

First off, we're not experts in this field. Only your doctor can diagnose true allergies and allergic reactions. What we're giving you in this section are some things we're found through research and reading and asking questions.

We are making no attempt to diagnose sensitivities or allergies.

True sulphite sensitivity can cause nausea, hives, chest tightness and even anaphylactic shock. However, even mild sulphite sensitivity is rare, affecting only about 1 percent of the general population and 5 percent of asthma sufferers.

Sulphites are a recognized food additive. Commercially available wines contain sulphites, even those labeled “Kosher” or “Organic”. Nearly all dried fruits and meats contain naturally occurring sulphites. Raisins can have up to 250 PPM.

Sulphites are also produced naturally by all grape-based wines during fermentation. Even without the addition of outside sulphites, wines could still contain them. Most winemakers, whether commercial or home-based, use sulphites to protect their wines.

Food containing sulphites can include dried fruits, raisins, maraschino cherries, beer, canned tuna, pickles, olives, cookies, crackers, salad dressing mixes, pie and pizza crusts, and flour tortillas.

Histamines can expand blood vessels in the brain, giving you a headache. Histamines tend to occur more in red wines than whites, and more in low acid reds than high acid reds. Again, only a small percentage of people are sensitive enough to be affected.

If you are sensitive to histamines, you might also have a problem with aged cheeses, sauerkraut, chocolate, some sausages, and other fermented foods.

Tannins, on the other hand, can trigger migraines in a large percentage of people already susceptible to migraines. There are phenolic flavonoids related to tannins in the skins of red grapes. If tannin is a migraine trigger, you will have problems with most red wines, very few blushes and roses, and probably no whites.

In summary, if you have a problem with reds, it could be tannin sensitivity. If you have a problem with whites, it might be sulphites. If it's all wines, it maybe histamines.

THE PINK STUFF

This product has a number of aliases, including Sterilex, Sani-Brew, Sani-Kleen, Chlora-Clean and Steri-Clean.

These are chlorine-based detergents and are extremely useful in cleaning equipment and removing stains. They are chlorinated alkali agents, generally made from chlorinated trisodium phosphate and potassium bromide.

Due to their highly alkaline nature, these solutions should not be mixed with acids or ammonia. They should not be used with stainless steel because of the corrosive pitting from chlorine.

Because these products contain detergents, you must rinse thoroughly with water after sanitizing, preferably two or three times. Failure to adequately rinse will result in a bad taste in your wine.

For a sanitizing solution, dissolve 3.5g in a litre (14g in 4 litres) of cold water. Allow the equipment to soak for at least 20 minutes. For heavily stained equipment, you can soak for up to 48 hours. Remember to rinse thoroughly.

These solutions are discarded after use.

CLEANING VS SANITIZING

Cleaning refers to removing visible residue and stains. This is usually done by soaking in a chlorine-based detergent – the Pink Stuff, followed by a really good rinse.

Sterilizing or sanitizing means treating equipment with a substance that will reduce or remove bacteria. This is usually done with a metabisulphite solution.

BENTONITE

Bentonite is a form of clay used as a preliminary fining or clearing agent. It is usually added directly to the must (juice) before adding the yeast.

Some instructions say to mix the bentonite with hot water in a bottle or jar or blender, some say to add it directly to the must. We've done both but prefer to pour the juice bag (or about 4 to 6 litres of juice from a 23-litre juice kit) into the primary then sprinkle the bentonite over it, stirring constantly and thoroughly to avoid many lumps.

Bentonite is used to coagulate proteins, so they fall out as sediment. If the bentonite is simply dumped in a stirred a bit, it will be poorly mixed and will not work completely. The proteins could later coagulate and precipitate out as sediment in your bottles. A wine that was clear could become cloudy, even after filtering. Making sure everything is well mixed is very important.

ISINGLASS AND GELATIN FININGS

Fining “cleans” the wine, clarifying it. By adding particles like proteins, clay, and diatomaceous earth, the molecules that cause clouding become “fixed” and precipitate to the bottom of the carboy.

Gelatin finings are a positively charged fining agent used for both wine and beer. They are the most powerful of all the organic finings and will also remove excess tannins (polyphenolics) and colouring particles (melanoidins) from wine.

Like gelatin, isinglass is made up of collagen fibres, but they are not cut and are therefore much longer. Isinglass is an extremely gentle, positively charged fining agent used for beer as well as for wine. Isinglass is not as strong as other fining agents and may fail to clear completely.

Unlike gelatin, this fining agent does not require the presence of tannins to act on the wine, which makes it an excellent clarifier for the white wines. Isinglass is the fining agent usually included with wine kits. The addition of proteins from the isinglass to the wine gives brilliance to the colour and improves the taste.

SPARKOLLOID

Sparkolloid contains compounds that make it gel. Through a very strong positive charge, it neutralizes cloudy particles and forms a compact sediment bed, pressing down other fining agents and increasing yield. It is noted for working when other fining agents have failed.

Sparkolloid is made from a special blend of polysaccharides (sugars) and diatomaceous earth, which is derived from the preserved skeletons of marine animals. The tiny particles of the diatomaceous earth can remain floating in the wine and never precipitate out on their own. If you have used Sparkolloid, you should filter your wine.

To use Sparkolloid powder, use 1 teaspoon of Sparkolloid for each 4 litres of wine to be cleared. Add 1 cup of wine for each teaspoon of Sparkolloid. Stir well and boil for about 3 minutes, then pour the mixture into the carboy through a plastic funnel. Replace the air lock and let stand for 10 days in a cool place to clear.

OAK CHIPS

Oak introduces flavours and aromas into wine, including vanilla, smoke, and wood-like flavours, all associated with high-quality, barrel-aged wines. It may be included with some wine kits.

Delicate or more floral wines can be spoiled by contact with oak. Over-oaking is impossible to reverse.

The oak may be provided as a powder, which is mixed with the water before being added to the must in the primary fermentor.

Oak may also be provided as chips, which are added directly to the finished wine in the secondary fermentor. The chips are left there for up to about 2 weeks. If you use oak chips, you should taste the wine every two to three days. When the desired oakiness is achieved, rack the wine into a clean carboy.

ELDERBERRIES

Elderberries are used in making specialty wines, and as an additive to grape concentrate wines. They give a rich “plummy” flavour, along with a reddish-brown colour. Elderberries also add tannin to bland wines.

Some lower grade wine kits may include elderberries to enhance the colour and flavour of the kits and help them approximate the flavours of premium kits.

Elderberries are added to the wine before adding the yeast. Push the berries under the fermenting wine every day to keep them moist. Leave the berries behind in the fermentor at the first racking.

YEAST NUTRIENT

Yeast nutrient provides essential minerals, trace nutrients and vitamins for yeast growth and metabolism during fermentation. It is used to help start slow fermentation and to restart stuck ones. It may cause foaming if it is added to an ongoing fermentation.

Yeast nutrient is made from diammonium phosphate (DAP), yeast, and magnesium. Using more than the recommended amount can give an unpleasant bitter, salty flavour to the wine.

GLYCERIN

GLYCEROL, FINISHING FORMULA

Glycerin contributes fullness and smoothness when added to a wine. Glycerin also gives the wine “legs”, the viscous drips that run down the side of a glass in which wine is swirled. If you decide to use glycerin, stir it in immediately before bottling.

Overuse gives wine an alcoholic or metallic flavour. It will not improve a harsh or bad-tasting wine.

POTASSIUM SORBATE

SORBIC ACID

Potassium sorbate prevents renewed fermentation in sweetened wines and inhibits the reproduction of mould and yeast. This will be one of the packets that come with your wine kits.

Do not add sorbate until all fermentation is finished and the wine is clear and stable. It is usually added to commercial wine conditioners and sweeteners to prevent refermentation after the addition of the sugar.

3. BEFORE YOU HIT THE BOTTLE

The last step in wine making is filling and corking your bottles. There are few things more important to the shelf life of the wine than how it is handled at this point.

The wine must be finished: clear, stable, and free of CO₂ (Carbon Dioxide).

Clear – means free of particles that could later fall out of the suspension and leave a deposit in the bottles.

Stable – means finished fermenting and with enough sulphites (SO₂) present to prevent oxidation and spoiling. If fermentation is not complete, you could get a “yeasty” taste and odour in your wine. Worse, it could start to ferment again, pushing out corks or exploding bottles.

Free of CO₂ – means that although the fermentation may be finished, a wine can still be saturated with carbon dioxide. If you fail to get rid of the carbon dioxide, it could later expand and push the corks out, or even break the bottles. CO₂ can also cause a really bitter taste in your wine.

When the fermentation is finished, most kits recommend adding fining agents such as isinglass, usually at the Degassing and Clearing stage.

The Degassing step is when vigorous stirring is called for. Much like shaking up a soft drink, stirring chases the CO₂ bubbles out and not only prevents the wine from being fizzy in the bottle, but also helps the fining agents to work better.

If you decide not to use fining agents, make sure that your wine is free of CO₂ before it is bottled. Failure to get rid of the CO₂ is how sparkling wines are made.

Most kit instructions don't tell you this but rack your wine back into the primary for degassing. We've found it to be a lot easier to stir vigorously in the primary than to pick up and shake a heavy glass carboy or find something that will fit into that narrow neck and give it a good stir. The extra racking doesn't hurt either.

We've also heard of - and known of - carboys exploding during this phase.

These are "toys" that you can chuck into your drill, such as the "Fizz-X". they will fit inside the neck opening of the carboy to give a good, vigorous stir.

We have a problem, however, with sticking a couple of pieces of rigid plastic inside a glass container and setting them to spin at a high speed.

Many long-handled spoons have a small paddle on the end that will fit through the neck of the carboy. It is still difficult to vigorously stir through that narrow neck opening.

Personally, we're too frugal to spend the money when we have a perfectly good primary sitting there.

4.

FILTERING

Any wine you buy has probably been filtered at one time or another. Filtering helps to remove fragments of fruit, fining agents and yeast cells that could eventually fall out of suspension and for sediment in the bottles. Filtering helps to improve taste, appearance and durability. Most wines will gain an added "sparkle" after filtering.

All filter machines and all the tubing and hoses should be cleaned and sterilized before and after use. Filter pads should be prepared according to the instructions that come with the filter unit, avoiding breakage of the pad.

It is a good idea to filter the wine into a spare carboy to let it settle for a few days prior to bottling. This will let any air introduced into the wine at the time of filtering a chance to dissipate and reduce the chances of oxidation.

Placement and preparation of the pads in the filter unit is important.

In manual filter units, the pads are separated by a ring and are sandwiched between two plates. The pads should be placed so that the rough surfaces face each other, and the smoother surface is against the plastic plate. The wine goes through the rough side and out the smooth.

You rinse these filter pads by assembling the filter unit and pumping several litres of clean water through it. This removes any fine bits of paper and paper lint from the pads before you actually filter the wine.

If you try to rinse the pads first, they will swell too much to assemble the unit properly.

Just about all the manual filters will leak to some degree. We put ours on a cookie sheet to keep the counter clean. After flushing the pads with clear water, we snug the wing nuts down a bit more to reduce the leakage.

Pads for electric filter units have two slightly offset “ears”. These ears are to ensure that the pads are inserted correctly into the filter units. Two plastic plates within the filter separate the three filter pads. If everything has been assembled properly, the pads and plates should be even and level across the top.

The filter pads for electric filters are usually soaked in clear water before they are placed in the unit.

Follow the manufacturer's instructions to clean the electric filter immediately after filtering. If you don't, there will be gunk inside it that can contaminate your next batch of wine and gum up the filter so bad that it won't work.

Whichever filter you are using, make sure to clean and sanitize all surfaces before and after using the units.

TYPES OF FILTER PADS

Different filter pads have different pour sizes. The choice of pad depends upon the kinds of solids to be filtered out.

#1 - COARSE

These pads are useful for filtering out heavier hazes and larger suspended particles, particularly with fruit wines. It may sometimes be necessary to re-filter with the #2 pads for maximum clarity. These pads are often used for red wines.

#2 - FINE OR POLISHING

This is a medium pad used for brightening and polishing. It is suitable for both light and heavier wines. This is the best all-round pad for most filtration purposes and is the one most recommended for wines made from kits. These pads are usually used for white wines and occasionally for reds.

#3 - STERIL

Sweet wines with a low alcohol content can have a tendency to re-ferment in the bottle if stored at too high a temperature. For these wines, the Steril pads should be used to remove the yeast cells. The very fine pours on these pads clog easily, so filtering first with the #2 pads is recommended. These pads can be used for hazy, light, sweet wines.

5. INTO THE BOTTLE

Before you bottle your wine, you need to check your bottles.

A standard wine bottle has a neck opening 18.5mm in diameter. This will accommodate a standard #8 or #9 cork.

All corks must be compressed to fit inside the neck of the bottle, they cannot be shoved in with your hand. If corks were the same size as the neck of the bottle, they would not provide a proper seal.

There are bottles with different neck sizes on the market, and you may encounter some as used bottles. In particular, the flagon shaped bottles from Portugal (Mateus) have a much smaller neck opening, and some screw-top bottles can have a very large neck opening.

With screw-top bottles, however, the thinness of the glass between the threads makes them unsuitable for corking. The original metal cap was moulded to the glass threads when the wine was first bottled. Once the cap has been removed, it is almost impossible to reseal these bottles properly.

If you get into the habit of rinsing your wine bottles as soon as they have been emptied, it will make cleaning them a lot easier. It is also a good time to check to make sure the bottles are not chipped or cracked.

If you are making champagne or other sparkling wine, you will need special bottles designed to withstand the pressure. Ordinary wine bottles will likely crack or explode if used for these wines. You will also need to use wire champagne hoods to keep the corks in the bottles.

BOTTLE COLOURS AND SHAPES

Generally, colour does make a difference by protecting the wine from ultraviolet damage. Wines intended for longer aging should be bottled in coloured glass – the darker the colour, the better the protection. Wines meant for quick consumption are usually found in clear glass bottles.

BORDEAUX BOTTLES

These are tall, straight bottles with a distinct shoulder. They are usually for both red and white Bordeaux wines, Cabernet Sauvignon, Merlot, Sauvignon Blanc, Zinfandel, and Italian Wines.

BURGUNDY BOTTLES

These are bottles with sloped shoulders. They tend to be used for both red and white Burgundies, Chardonnay, Chablis, Pinot Noir, Beaujolais and Chat-du-Pape wines.

RHINE OR ALSATIAN BOTTLES

These are slightly taller than the burgundy bottles and have a more tapering shape. They are generally blue, green or brown in colour. These bottles are usually used for German white wines.

Being the frugal creatures that we are, we tend to use whatever bottles we have at hand, regardless of the “proper” bottle.

BOTTLE SIZES

Most bottles are now standardized to a 750ml capacity, although there are some table wines in smaller 500ml bottles. Dessert wines, such as ice wines, are usually bottled in 375ml bottles.

There are larger bottle sizes:

Magnum	1.5 L	Imperial	6 L
Jeroboam	3 L	Methuselah	6 L
Rehoboam	4.5L	Salmanazar	9L

CLEANING

Wine bottles must be clean and sanitary, with no chips or cracks. If the bottles have some residue, soaking them in chlorine-based detergents such as SteriClean or Sani-Brew (the pink stuff) and rinsing with hot water should clean them up in an hour or so.

Used commercial bottles present a special problem – getting the labels off. Commercial labels use a glue that will not react easily to moisture. We have had the most success removing these labels by dumping the bottles into a laundry tub, or bathtub filled with straight hot water and a generous handful of laundry detergent. This helps to soak any gunk from inside the bottle and will soften most commercial glues. A plastic pot scrubber and a razor blade should clean off most labels.

There are some bottles that we've discarded (into recycling bins of course) because we just couldn't get the labels off.

SANITIZING

Bottles must be sanitized just before bottling. After they have been thoroughly cleaned, rinse them with a sulphite solution. This will prevent the growth of any spoilage organisms in the bottle. Rinse with the sulphite, then with clear water, and set the bottles to dry.

There are a couple of “toys” that can make this job easier. The first is a sulphiter. It consists of a bowl to hold the sulphite solution and a spring-loaded pump in the middle of it.

You upend the bottle over the pump and push down firmly a couple of times to shoot the sulphite solution into the bottle.

The second “toy” is a brass bottle washer that attaches to your faucet. It lets you blast clean tap water into the bottle to rinse out the sulphite solution.

The third “toy” is a bottle tree. They come in several sizes and let the bottles perch upside down to drain. You can hang up to 90 bottles on about a two-foot diameter tree.

You can also take the rack out of your dishwasher and perch the bottles on the prongs of the rack.

FILLING

Now that the bottles are clean and sanitized, it's time to fill them. You will need a sanitized siphon hose, a hose clamp, and racking tube.

The full carboy must be higher than the bottles so the siphon action will work. You will also need a place to put your filled bottles. If you are doing this by yourself, you will probably fill all the bottles, then cork them. If you have help, one can fill while the other corks.

A nifty “toy” is a bottle filler. It is an excellent tool for getting the fill levels right. The filler is a rigid tube that attaches to the siphon hose and has a one-way valve at the other end.

When the bottle filler is in the bottle, it rests on the valve, opening it. When you lift up the bottle filler, the valve closes, and the flow of the wine stops. It also helps prevent excessive splashing and agitation of the wine, which can lead to oxidation.

Filling should be done quickly, with a minimum of exposure to the air. Too much agitation may reduce free sulphur dioxide preservative levels to the point that browning (oxidation) may result. There is also a chance that some stabilized yeast cells may activate and cause refermentation.

If you are using a manual wine filler, some people like to filter directly into the bottles. With both the electric and manual filters, we prefer to filter the wine into a spare carboy and let it sit for a day or two before bottling. This gives any air introduced at the time of filtering a chance to dissipate.

Bottles should be filled so that the wines are about 1 cm (1/2 inch) from the bottom of the cork. This is generally about 4 to 5 cm from the top of the bottle but will depend on the size of cork you are using.

You don't want to leave a lot of ullage (airspace) in the bottles, but you have to leave enough room under the cork for the compressed air to sit. Inserting a cork compresses the air between the wine and the top of the bottle. If there isn't enough room, this compressed air could shove the cork back out.

After the corks have been inserted, it is a good idea to wipe off the bottle and the cork. This prevents any moisture on the top of the cork from forming mould. It also removes any wine you may have spilled on the bottles when you filled them.

We usually label our bottles as soon as they are filled. This way the bottles are wiped clean, then labeled, then shrink capped before we forget which wine we just bottled. We have several empty boxes on hand that the wine bottles came in. We do get the bottles into the boxes right away, but it is usually several days before we get around to carrying them to the wine racks.

You should leave the wine bottles standing upright for 3 to 5 days after corking. The compressed air has to work its way out past the cork, and it can only do that if the bottle is standing upright. This also allows the corks to fully expand and dry.

If you immediately turned the bottle on its side, the pressure would still be in the bottle. The air would be pushing the wine, and the wine would be pushing against the cork, and could force it out if the bottle.

After several days, turn the bottles on their sides for long term storage. This is when the wine against the cork will keep the cork moist, preventing leaks.

6. CORKS AND CORKING

Wine corks are made from the bark of the cork tree (*Quercus Suber*).

Most of the world's cork oaks are grown in Portugal. Every 7 to 10 years the bark of each tree is methodically peeled off, dried, washed and graded. Individual corks are machine punched from the prepared bark sheets.

Cork is a natural material and can deteriorate with time. This gradual deterioration of corks with age can lead to evaporation of wine from the bottles. Many old and valuable bottles must be topped up and recorked in order to preserve the contents.

Never use a cork that smells musty or mouldy or is dry.

There are now synthetic corks available in several shapes. Some are shaped and coloured to resemble natural cork and must be inserted and removed like natural corks. Some are white plastic "T" shapes that have plastic fins on the part that fits in the bottle. These stoppers can be shoved in by hand. So far, most plastics or synthetics are more expensive than natural corks. And, like all plastic, they won't decompose when discarded.

Many true wine lovers feel that any grade of natural cork is superior to a "plastic" cork. They feel that nothing can enhance the anticipation of a good wine like the sensual "pop" as the cork is extracted.

We haven't yet used synthetic corks ourselves and are reserving judgement.

TYPES OF CORKS

Corks come in different sizes, grades and qualities. They can be subject to various treatments including dyes, bleach, wax or silicone. They can also be made from composite of cork chips bonded together.

NATURAL / WINERY GRADE

These are premium grade corks and have a price tag to match. They may not be the best choice for any wine being kept for less than three years.

These corks are punched out of the best pieces of cork bark and are not patched or filled.

Natural corks can last from 3 to 10 years or more, depending on the quality of the cork and storage conditions.

COLLIMATED / ECONOMY GRADE

These are corks cut from less solid layers of the cork. They can contain small voids and cracks that are filled with a glue -cork combination. They are a less expensive than winery grade corks and are suitable for wine stored up to a couple of years or more.

We have used these corks and have found on occasion that the “corky dust” used as fill can sometimes come out of these corks and show as a fine dust both inside and around the top of the bottle.

AGGLOMERATED

These are made from chipped cork pieces ground to a specific size and glued together with non-reactive polyurethane glue. They are inexpensive, easy to handle and are suitable for wine bottled and stored for 6 months to a year or more.

These are the corks most often used by home winemakers. We have stored wines for over three years with agglomerated corks with no problems.

WHICH CORK TO USE

Which cork is right for you? Look realistically at how long you expect to store your wine before drinking and figure out how much cork fits in your budget.

A good rule of thumb is “You get what you pay for”. The cheapest cork isn’t always the best deal, and if you do decide to keep some bottles for the future you may find yourself having to recork them in a few years. In addition, if you are making a wine kit you intend to drink within the next 3 months, and expensive cork might not be the most frugal choice.

Most wine stores stock the two basic corks, the #8 and #9. Each of these corks come in two lengths, regular and long.

Cork	Length	Width
# 8 Regular	38 mm	22 mm
# 8 Long	45 mm	22 mm
# 9 Regular	38 mm	24 mm
# 9 Long	45 mm	24 mm

The #9 corks are 2 millimeters wider than the #8s, giving a tighter compression in the neck of the bottle, and increased storage time. Longer corks will also increase storage time.

We tend to use the #9 Longs as a rule of thumb. They’re not that much more expensive and if we manage to tuck a few bottles away for longer storage, they will have the “better” corks in them.

Whichever cork you choose, it should be inserted so that it is slightly below the rim of the bottle.

PREPARING THE CORKS

You should sanitize the corks with a metabisulphite solution just before bottling. The metabisulphite will prevent any bacteria on the cork from spoiling your wine.

A word of caution: corks can soak up sulphite solutions and transfer them to the wine if you soak them for a long time. Stick to a short soak and a good rinse and they'll work just fine.

All corks must be compressed before they will fit into the bottles, they cannot be inserted by shoving them in with your hand. You should also take into account the type of corker you will be using before you prepare the corks.

FOR MANUAL COMPRESSION CORKS

Manual compression corkers are usually a double lever style. These corks use a plunger to force the cork through a funnel-shaped opening and into the bottle.

Some models allow you to set the depth the corks will be inserted into the bottle; others have no adjustment.

Manual corks will push the cork in but require that corks be soaked and softened a bit to allow them to slide through the small hole. If overdone, this soaking may soften the corks to the point that they become mushy, causing them to disintegrate at a later date, or not to properly seal the bottle at all.

For double lever corkers, first sanitize and rinse the corks. After rinsing, soak the corks for about 20 minutes in 4 litres of lukewarm (not hot) water. You can add about $\frac{1}{4}$ cup of glycerin to the water.

If you choose not to use glycerin; you may want to increase the soaking time to one to two hours. You can then remove the corks to a sanitized bucket. The metabisulphite will sanitize the corks and the glycerin will help the corks to slide through the corker.

FOR FLOOR / BENCH CORKERS

Iris-jaw type corks squeeze the cork and push it into the bottle with a lever arm. They hold the bottles steady on a spring-loaded base and allow you to adjust the depth that the cork is inserted into the bottle.

If you are looking to purchase this type of corker, there are a couple of models that look similar, but can differ greatly in the quality of construction.

These corks only require that a cork be sanitary before insertion.

We prefer to give the corks a good “slosh” around in the sulphite solution, then rinse them well and leave them in a container of cool water while we prepare the bottles. We then remove the corks to a sanitized bucket.

Remember to keep the iris mechanism wiped dry during corking. If you are inserting wet corks, you may get dirty water dripping into your bottles.

UNCORKING PROBLEMS

Occasionally people have a problem with corks shredding when they uncork their wine. The usual culprit is the corkscrew.

The most common corkscrews have a small auger that screws down into the cork, causing two levers to rise. When you push these levers back down, the cork gets pulled from the bottle.

Less expensive corkscrews have a fairly blunt auger that plows through the cork and can shred it as it is inserted.

Your best bet is to buy a better corkscrew with a sharp auger that will slice cleanly into the cork. These corkscrews tend to be of higher quality construction and will be cheaper in the long run.

Other causes of shredding corks are using corks that were soaked too long or using corks that were old and dry.

7. SHRINK CAPS AND CAPSULES

Shrink caps protect corks from dust and “basement critters” yet still allow the wine to breathe. They also look good and give your wine a more professional presentation.

Wine bottles used to be dipped in wax to help seal them. Some bottles containing vintage ports and other very special wines are still treated this way. Wax is time consuming and expensive to apply. It also leaves a mess on the counter, with little waxy crumbs all over the place when you remove it. Shrink caps are a much easier, neater alternative.

Capsules used to be made of lead, which provided a nice finish and appearance and very good protection for the cork. Many wine-producing jurisdictions have prohibited the use of lead and, most producers have switched to other alternatives.

Most home wine makers use the plastic “Shrink Cap”. The loose caps are placed on the top of the bottle and then shrunk onto the neck with the application of heat. We’ve found that a hair dryer will work, but most get the bottle too hot before the cap shrinks.

Some people hold the shrink cap of the bottle with a fork or spoon, then dip the whole thing into boiling water. This can be a somewhat awkward procedure.

The best method we’ve found is to use steam from a kettle. A boiling kettle will shrink a cap in two or three seconds as you rotate the bottle over the steam. The hardest part is finding a kettle that doesn’t automatically shut off after it comes to a boil.

8. STORING AND AGING WINE

Storing a wine usually means keeping it as long as it maintains a pleasing aroma and taste. Aging, on the other hand, usually means the gradual improvement of the wine in the bottle. As it ages, the taste of the wine becomes more refined, reaching the peak of its taste, then slowly losing quality until the end of the storing cycle.

White wines often reach their peak in a few months. Red wines may sometimes need to age for years before reaching their peak. Taste your wine regularly. If it's good, it's ready.

Try to maintain a constant temperature to prevent premature aging. Wine should be kept in a dark, cool room, preferably between 13°C and 15°C. (we also feel that this is the best temperature at which to serve red wines, not at the usual tepid serving temperature). Rapid temperature changes in the area can harm the wine, but gradual temperature changes are less of a problem. Your basement is not a bad choice, although the laundry area near the dryer can be subject to too many temperature fluctuations. There is also a lot of dryer dust.

Wine prefers a humid place. Keep the wine bottles on their sides to keep the corks moist, otherwise the corks dry out and let in unwanted air, spoiling the wine. Keep the bottles on a solid foundation as vibration can also irritate wine molecules and lead to oxidation.

Wine is susceptible to other odours. Corks are meant to breathe. Fumes from paint cans or other chemicals may enter the wine bottle and taint the taste of the wine.

9. MORE ON KIT WINE INSTRUCTIONS

You may have noticed that some companies provide excellent instructions with their wine kits, while others leave a lot to be desired.

After you have been making wine from kits for a while, you start to develop your own procedures, based on the instructions from different kits and different suppliers.

The following instructions are to be used in conjunction with your manufacturer's instructions, not to replace them. They should work with most wine kits, from 4-week to 6-week kits, up to a 23 litre juice kits. Some kits will have other ingredients, such as oak chips to add at different stages, so make sure you read the instructions that come with your kit.

Remember that your hydrometer is the only thing that will tell you when to progress to the next step. Your calendar will give you a strong hint, but the hydrometer is the only way to know for sure.

Wine can't tell time, so it isn't bothered if you take longer on any or all of the steps.

Most of the terminology in these instructions is explained in more detail in other sections of the book.

STEP 1: GETTING STARTED

1. Wash all your equipment well and rinse.
2. Sterilize, sterilize, sterilize. Make sure that every piece of equipment that will contact the wine is washed and rinsed with a sulphite solution, then rinsed with plain water.

3. Hold the neck of the juice bag firmly in one hand and pry off the cap. Slowly pour the contents of the juice bag into the primary fermentor, allowing the juice to splash a bit to aerate it. At this stage, the aeration helps the yeast to start. If you are using a 23-litre juice kit, only out in 8 to 10 liters or so at this point.

4. Slowly sprinkle the packet of Bentonite, stirring constantly. Some instructions say to mix it with 500ml (2 cups) of hot water in a bottle or jar or blender, some say to add it directly to the must (juice). We've done both, but prefer to add it directly to the must, it seems to dissolve better this way. Whatever method you use, stir well and try to eliminate as many lumps as possible.

5. If you are using a 23-litre juice kit, fill the primary to about the 20-litre mark.

6. Double check that the temperature of the must is between 20°C and 25°C. By not filling the primary to the 23-litre mark right away, you have a chance to adjust the temperature. For kits other than the 23-litre juice kit, rinse the juice bag with clean water and pour into the primary. Fill the primary only to about the 20-litre (4-gal) mark with clean water. We've always preferred to use distilled water. It has been sitting at room temperature, so you shouldn't have to adjust the temperature of the must for successful fermentation. Some tap and well waters can leave your wine hazy or give it off flavours. There can also be a seasonal variation in the quality and content of tap and well waters. Double check that the temperature of the must is between 20°C and 25°C. If it's too warm or too cold, the yeast may not start to work. By not filling the primary to the 23-litre mark right away, you have a chance to adjust the temperature by adding warmer or cooler water.

7. Finish filling the primary to the 23 litre (5 gal) mark.

8. Check the specific gravity of the must, it will probably be between 1.075 and 1.085. If you want to calculate the potential of your alcohol of your kit, you will need this reading.

9. Sprinkle the must with the wine yeast. Some kits say to stir it in, some don't. Again, we've done both with equal success, but prefer just to sprinkle without stirring.

10. Cover the primary. If you are using plastic, tie it loosely. Keep the container up off the floor, away from draughts.

11. Put the primary in a warm location (between about 20°C and 25°C), out of direct sunlight and away from any vibrations. Ignore it for about 7 days. If the room is a little cooler, fermentation will take a little longer – not a problem. You should start to see gas bubbling through the air lock within 24 hours or so. Some wines will bubble quite vigorously; others may not seem to bubble at all. You can check the specific gravity to make sure it is dropping.

STEP 2: THE FIRST RACKING

About Day 7 to 10

1. This is when the S.G. is 1.020 or lower, not when the calendar says it is the right day. The calendar will give you a hint, but the hydrometer is the only reliable guide to when to proceed to the next step. Most of the fermentation will be complete by this point, and you won't see a lot of bubbles through the air lock.

2. Clean and sterilize the carboy. Rack (siphon) the wine into the carboy, leaving most of the sediment behind. Allow the wine to splash a little, it helps to clear it. You can tilt the pail a bit to transfer as much of the wine as possible, avoiding transferring any "gunk".

3. Most people top up their carboys to the 23-litre mark, usually between the "shoulder" and the "neck", some don't. We always do. We've found no impact on the final alcohol content or taste, but we get a little more wine. This also lessens the chance of oxidation.

4. Insert the air lock and stopper into the mouth of the carboy. Leave the carboy in a warm, dark area for another 12 days or so to complete fermentation. If the room is cooler, fermentation will take longer. We have found that a slower, cooler fermentation tends to yield a better wine than a hotter, faster one.

5. Immediately wash the sediment out of your primary. The bentonite you added is clay, so if you don't clean it out while it is still damp, you may never get it out.

STEP 3: DEGASSING AND STABILIZING

This will likely be around day 21 to day 27. Remember, your calendar gives you hints, but your hydrometer tells you for sure.

1. All fermentation should now be complete. The specific gravity (S.G.) must be between 0.990 and 0.995. If the S.G. is any higher, wait a few more days. Like we said, wine can't tell time, a lot depends on the temperature and the type of wine kit.

2. Most kit instructions don't tell you this but rack your wine back into the primary fermentor now. It's time to "de-gas" the wine and it's a lot easier to stir vigorously in the primary than trying to pick up and shake a heavy glass carboy or trying to get something to stir well through that small neck opening. We've also heard of (and known of) carboys exploding when the stirring releases the carbon dioxide.

3. Follow the kit instructions to add the Metabisulphite and the Potassium Sorbate. Some kits may just letter or number their additive packages, but they should be these two ingredients. Together they help the wine to age better without risking refermentation and inhibit bacterial and mould growth. You may be asked to add isinglass now, or your instructions may tell you to add it in the Clearing stage. We prefer to wait until the Clearing stage.

4. Vigorously stir the wine to remove the residual carbon dioxide gas. Do this at least 3 to 6 times a day over the next 2 to 4 days.

5. If fermentation is not complete, or if you fail to completely de-gas the wine, you could get exploding bottles or popping corks further down the road.

STEP 4: CLEARING

This will be about day 24 to day 35.

1. The wine must be thoroughly de-gassed. The specific gravity (S.G.) must be between 0.990 and 0.995.

2. Add the last fining agent, usually IsoKleer or Isinglass, and mix it thoroughly into the wine. Some instructions may have told you to add this ingredient at the Degassing and Stabilizing stage. We prefer to add clearing agents now, when the wine is no longer being stirred up.

3. Now is the time to taste the wine and see if you want to sweeten it. Remember that it is going to taste fairly “green” at this point. Some people call this “green” edge a bitter taste, but like a good soup or stew, the longer it sits, the better it gets. That bitter taste will mellow out.

4. We have added a “Wine Conditioner” to a number of our wines. Adding a bit of wine conditioner, even to dry wines, can help take the harsh, green edge off without actually sweetening, and help make a really mellow, smooth wine. You can add 1 to 3 ounces to the carboy for a fairly dry wine; 6 to 8 ounces to take it to the shy side of a 1, and about 10 to 12 ounces to take it to a sweetness over 1. You can always add more sweetness, but you can’t take it out if you over do it. Some people prefer to sweeten the bottle as they open it. Remember, as a wine ages, it mellows. You may not want to add a conditioner if you traditionally leave your wines to age for 6 months or so before drinking.

5. Refit the cover and leave the wine undisturbed to clear for about 6 days. Wines clear better at cooler rather than warmer temperatures.

STEP 5: FILTERING AND BOTTLING

This will be about day 28 to day 45 or longer.

1. If the wine is not clear, it is not yet ready to bottle. Depending on the temperature, some wines will take longer to clear than others will. The longer you leave it, the more it will clear.

2. Many people filter their wines. If you try to filter a wine that is still cloudy, it will clog the filter pads, and could damage the motor of the electric filter. If you do use an electric filter, filter the wine back into the carboy and let it sit for a day or so before you bottle. If you use a manual filter, you can filter it back into the carboy, or directly into the bottles. Whichever method you use be careful not to disturb any sediment that may be at the bottom of your primary.

3. Remember to leave the bottles sitting upright for several days after bottling to allow the air compressed into the bottle by the cork a chance to escape.

4. We label all our bottles, both with a varietal label and with a “date bottled” label. Once you’ve made a few kits, you can forget which wine was which, or which batch was which. If you don’t label, it can be embarrassing if you want to brag about how great a particular wine turned out, and you can’t remember which bottle it was. Besides that, a label and shrink cap really makes a great presentation, whether as a gift or on your dining table.

5. The wine isn’t bad at this point but will still taste fairly “green”. Wines will continue to mellow, if you can wait long enough for them to age for a while.

10.

WINE LOG

Name of Wine		RED	WHITE	BLUSH
Brand		Date Purchased		
Purchased From				
Date Started		Starting Specific Gravity		
First Racking Date		Specific Gravity		
Second Racking & Degassing Date		Specific Gravity		
Stabilizing & Clearing Date		Specific Gravity		
Filtered	YES	NO	MANUAL	ELECTRIC
Filter Pads	#01	#02	#03	
Sweetened	YES	NO	How much sweetener	
Sweetened with				
Date Bottled				
Type of Corks used				

COMMENTS

I'd make this again	YES	PROBABLY	MAYBE	NO



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