

# GUIDE TO MAKING WINE AT HOME



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# INTRODUCTION

Making your own wine is an enjoyable and rewarding experience. The quality of kits and equipment has come on in leaps and bounds, and today it is easy to make wines which are comparable to good commercial equivalents. You will also save money too, as even the most expensive kits will produce fantastic tasting wine at under £2.50 a bottle (most kits will cost around £1.50 per bottle to produce). The proliferation of home bars and an increased trend for drinking at home, post-covid, has made craft winemaking at home an attractive choice. Styles and flavours of wines continue to expand so you should easily find a drink which becomes your 'go to' favourite.

Making wine is a very easy process and you do not need any skills to get started. There are a few basic rules to ensure you achieve consistently delicious drinks, which we will explore in this guide.

As you gain experience you can experiment with different kits and techniques and perhaps even supplement your kits by trying some country wine recipes using real fruit or vegetables.



Country wines require a little more time to make and mature, so many brewers are happy to stick with kits. They are good fun and very cost effective to make though, so you may like to mix things up and create a varied wine stock.



The choice is yours. We are a specialist wine making supplier and have been advising customers through our retail shop since 1971, so we have covered pretty much all topics and questions. Home beer & winemaking retailing has changed since covid lockdowns, and many brewers now buy and interact online. We continue to offer a high level of customer service online and we support the Facebook group Pure Brew. This can be accessed through our Dark Rock website. It is a free resource and consists of over 1000 members, with considerable experience. Unlike some forums, the group is both knowledgeable and friendly, and members are keen to share experiences and advice.

This is a great port of call for new brewers and winemakers who may have a variety of questions they need answers to.

Although there is a great choice of supplies online, and forums to support you, we would recommend visiting a good physical retail shop from time to time. You will find out about new products that are coming to market and get the chance to talk with people that have a lot of experience in the hobby.

So, let's jump in and start making great wine to share at home with friends and family.

# WINE KITS

Before choosing equipment, it is worth considering the style of wine you are going to make, how much you wish to make, and where you will make and ferment it. We recommend new winemakers start with a wine kit and then add other pieces of kit if you wish to make country wines later. Most wine kits will follow a similar process to make and will contain everything necessary to make your wine. Cheaper, basic kits may require extra sugar, but premium kits will have all the sugar naturally contained in the grape concentrate provided in the box. Kits normally make 23 litres (5 gallons) of wine which will produce 28-30 bottles of finished wine. There is a more limited range of 5 litre (one gallon) kits which will make 6 bottles of wine. In the past, most kits used to be sold as 1-gallon kits but nowadays few winemakers make 1-gallon batches. Today the trend is for 5-gallon batches. They are cheaper per bottle to make, and they allow you to build a stock up to mature. The choice of styles is far greater too.

Choice of wine kits can be thought of like an elevator. The starting point is a Basic wine kit. These will cost around £25 per 5-gallon kit and will require some extra sugar to be added to the grape concentrate. They are easy to make, and some brands are sold as 7 day wines.

This means that they will be ready to drink in one week. Basic 7 day wines do not need maturing so if you want fast results this may be a consideration.

Premium Kits tend to contain more grape concentrate and all the sugar needed to create the alcohol will be contained naturally in the grape concentrate. The box will contain several sachets which are added at specific stages of the winemaking process. Premium kits trend to ferment



in 2-3 weeks and will be ready to drink in one month. If the wine is filtered and bottled, it will continue to mature up to a year and the quality will improve with age. Premium kits are slightly more expensive (typically £40 - £55) and will only require the same equipment to produce as a basic kit. The quality of the final wine will be much better, however, and the extra few weeks maturing time will reward you with a superb tasting wine. As a rule of thumb, the quality should be comparable to a £6-£8 bottle of commercial wine.

#### **Reserve and Ultra-Premium**

**Reserve Kits** take your winemaking to another level. They contain much higher levels of grape concentrate (10-14 Litres). These kits contain everything you need to make commercial quality wines that rival £10-£15 per bottle equivalents. Styles are designed



to clone your commercial favourites and the results are stunning.

Some kits may include a separate bag of grape skins or oak chippings, to subtly adjust the flavours. These wines may take 14-28 days to ferment and will benefit from filtering and maturing in bottles for 3-6 months. They will always improve with age and although these kits cost £75-£110 the



results really do provide the wow factor. Maybe considering these kits for a special occasion such as Christmas.

Tip: We strongly recommend that all Premium, Reserve, and Ultra-Reserve kits are filtered through a Vinbrite Wine Filter. This will ensure a commercial clarity and a final finish which will be comparable to commercial wines.

# EQUIPMENT

The golden rule is to always buy good quality equipment from a reputable home brew retailer. Based on fifty years of experience, we have assembled starter kits which contain everything you need to make your chosen style of wine. We only select food grade plastic, and all our equipment is reliable and robust, to give you years of excellent service.

Our Basic Starter kit includes everything you need to get you up and started making basic or premium wine kits. You can then build on this equipment base as you advance with the hobby.



You will need another bucket to syphon the wine into at the end of the process, and bottles or a wine box to store the wine in once it is made.

If you want a comprehensive level of equipment to begin your wine making journey, then we would recommend the Master Your Craft Deluxe Wine Making Starter Kit.

This includes all the equipment you will need to make all styles of wine including Country Wines.

The deluxe starter kit includes a heating pad to ensure that your wine ferments at a constant temperature, whatever the time of year. It also includes a wine filter system, and so represents excellent value as a complete equipment bundle. A 'what's in the box' guide to the starter kits is illustrated at the bottom of this guide.

# PREPARING TO MAKE A WINE KIT

In our experience there are two areas to focus on to ensure that you get consistently great results from your winemaking. Firstly, sanitise everything prior to use. By far the biggest failure of wines is through poor sanitisation of equipment. The second important area to focus on is temperature and monitoring the fermentation. It is important to store the wine in a room at an appropriate constant temperature to ensure a healthy fermentation. The kit instructions or yeast pack provided will state the correct

fermentation temperature (this may vary according to the yeast). If the room is under 20C you may need to put a heat pad under the fermenter.



ff the room temperature is higher than 24C you may need to find a cooler place. When the fermentation is finished and the wine is clearing, try to complete the process by filtering and bottling (or storing in a wine box) as soon as possible. Whilst fermentation is progressing the wine will produce a layer of CO2 which will keep airborne bacteria at bay. Once fermentation finishes this will stop so it is advisable then to complete the process as soon as possible to avoid the subsequent risk of airborne contamination. Try to avoid frequently lifting off the lid of your fermenter during fermentation as this can introduce airborne bacteria into the wine.



Your starter pack will include some Suresan no-rinse sanitiser. This is a very kind routine sanitiser that can be used on all equipment including glass and stainless steel. It is a contact sanitiser. Simply mix a spoonful of Suresan into around 1 litre of warm water. Then swill the solution around your fermenter and immerse other equipment such as spoons, syphon tubes etc in the solution. You may wish to use a sponge to ensure all surfaces that will be in contact with the wine are sanitised.

Discard the solution after use as it is neutralised after 1 hour. Drain the solution from the equipment (many winemakers give equipment a quick rinse under the tap to remove all the sanitiser, but this is not necessary). Your equipment is now ready for immediate use.

# MAKING A WINE KIT

The most popular choice of wine kits that we sell is our Dark Rock Series.



When creating this range, our mission was to create wine kits that are simple to make and taste amazing. With these kits we think we've done just that. Everything is supplied (except water) together with easy-to-follow instructions. We source our grape concentrate from top quality

vineyards, so your finished wine will rival the quality of commercial producers. Suitable for beginners and experts alike, we think you'll love the results.

These contain 5 litres of commercial quality grape concentrate. The kit also contains a high-quality wine yeast and nutrient to feed the yeast. The pack also includes a sachet of yeast stopper to add at the end, and a 2 stage wine finings sachet, to rough clear the wine before filtering. The process for making this wine is similar to most other brands that are available.

Pour the grape concentrate into a sanitised fermenter. Then top up to the 23-litre mark (5 gallons) with water. Add a little boiling water to the mix in order to try to achieve a final temperature of 24C (75F). (Note: If you are using a basic kit which requires extra sugar then this would be dissolved into 2-3 litres of boiling water and added to the fermenter at this stage). Most winemakers use tap water. However, the quality of your final wine will be improved by using bottled spring water. We would certainly recommend using bottled spring water when making Reserve or Ultra-Premium wines. Sprinkle the contents of sachet 1 (yeast and yeast nutrient) onto the surface of the wine and stir well with a long-handled spoon for two minutes, backwards and forwards, to aerate the wine.

Seal the fermenter and fit an airlock (filled with a little tap water). Then leave in a warm place (around 22-24C) to ferment. After one or two days you should notice CO2 escaping through the airlock and a foam should have developed on the surface of the wine. The fermentation will be vigorous initially and then calm down after a few days. When there are no signs of CO2 emerging through the airlock, this is an indication that fermentation



has finished. Take a hydrometer reading at this stage. The reading should be between 0.996 and 1.000 (see below for how to use a hydrometer).

If fermentation has completed carefully syphon the wine from the sediment that will have formed at the bottom, into another sanitised fermenter. The equipment kit will contain a syphon kit. One end will have a flow control clip which you can use to reduce or stop the flow. The other end will have a rigid tube with a sediment trap at the bottom. This prevents yeast sediment from being sucked from the bottom of your fermenter. There is also a bucket clip to conveniently attach the rigid end of the tube to the fermenter. Sanitise the syphon before use. Then place the fermenter on a higher-level work surface and your sanitised second fermenter underneath. Fit the rigid end of the tube with sediment trap into the bucket and suck the wine to prime the tube. Once filled close the control valve then position the open end over the second fermenter. Release the clip to start filling (it can be quickly reclosed if necessary). Carefully syphon out all the wine avoiding disturbing the sediment. Towards the bottom carefully tilt the bucket to retrieve as much of the wine as possible. The final sediment can be discarded.

Add the contents of sachet 2 (stabiliser) to the wine and stir thoroughly backwards and forwards for 2-3 minutes to degas the wine. This will release any trapped CO2 molecules and help clearing. Then pour the contents of sachet 3 (Finings) into the wine and leave for 2 hours. Then add sachet 4 and stir gently for 15 seconds to mix it into the wine. Note: the finings sachet may be a single pack with two separate pockets. Your wine should then be left in a cool room to clear for 7 days.

After 7 days, filter the wine through a Vinbrite Wine Filter to remove any remaining suspended particles (yeast and proteins). The wine should then have a commercial clarity and a pure taste. Taste the wine at this stage. If you prefer a sweeter wine, you can add a little glycerine or wine sweetener, which is available from all good home brew retailers. Be careful to add this in small stages and taste between additions. If you add too much and the wine becomes too sweet, it is not possible to subsequently make it drier except by blending with another drier wine.

Your wine should now be bottled as soon as possible. Fill bottles to within 2 cm of the top, either by using the syphon kit or a bottling stick fitted to the fermenter tap (this is available as an accessory or is included as standard with the deluxe starter kit). Bottling sticks are a quick and convenient way to fill bottles. Simply push the spring-loaded end onto the bottom of the bottle and it will start to fill. When the wine reaches the top lower the bottle. This will stop the flow and ensure the correct air space is maintained at the top of the bottle. Once filled, bottles should be secured with a cork, and a shrink seal to give a professional finish. If you are using screw topped wine

bottles, then fit a Novatwist cap (these also contain a plastic bottle seal so no shrink seal will be necessary). Novatwist caps can be reused so they represent good value. Finally apply a bottle label to complete the appearance and then store your wine in a cool place to mature. As a rule, the more expensive the kit, the more the wine will benefit from maturing for a longer period of time.



We recommend maturing basic kits for 3-4 weeks (although many winemakers drink them immediately). Premium kits should be left for 3 months ideally, and ultra-premium kits will continue maturing for 6-12 months (although they can be consumed earlier).

These instructions illustrate how to make a Dark Rock Wine Making Kit, which is the range we would recommend for your first attempt. There are several styles to choose from, including Reds, Whites, and Rose. The process will be similar for other brands, simply follow the instructions provided with the kit. Country winemaking follows a slightly different process before the fermentation, but these wines are still easy to make and can provide a lot of fun. It is possible to blend country wines with kits to provide interesting hybrid flavours. Often fruit is freely available, or on offer cheaply at supermarkets when it is reaching its sell by date. Country wines are very cost-effective and require very little extra equipment. If you want to supplement your kits with Country wines, there are prizewinning recipes free to download on the Dark Rock website. We recommend speaking to a member of our team to discuss the process and equipment/recipe requirements.



# **STORING YOUR WINES**

Starter kits will provide all the necessary equipment to make your wine. They tend not to include final storage solutions as this is a personal choice. Your first decision will primarily be whether to bottle your wine or store it in a wine box with a collapsible inner bag.

#### Bottling.

A range of high-quality purpose made wine bottles are available from good home brew retailers. They are available in either clear or green glass. Usually, clear bottles are



are used for white and rose wines and green bottles for red wines (to reduce the risk of light eroding the colour over time). However, the final choice of colour can be based on your preference. You may choose to collect and clean pre-used bottles. If this is the case it is important only to use bottles which are good quality and free from damage. Screw cap wine bottles can be used by carefully removing any metal seals and replacing with Novatwist caps. These are available from good retail stores. Make sure that the caps and corks are tight enough to prevent leakage. We recommend standing bottles fitted with Novatwist caps upright rather than in a wine-rack. If you intend to bottle it is worth considering investing in a bottle washer and drainer. This makes cleaning/sanitising a batch of bottles very fast and easy.

Sanitise all bottles before use and fill with wine to 2 cm from the top using your syphon tube or bottle filling tube. Once bottles are filled, secure the cap, or fit a cork and shrink seal.

#### Wine Box.

Some brewers prefer to store their beer in a wine box for convenience Wine boxes have advantages in that the wine is faster to transfer from the fermenter and you can pour off any volume to suit your needs. As wine is dispensed from a wine



box, the inner bag shrinks around the wine preventing any air contamination. Wine boxes are available in a range of sizes from your homebrew retailer. We recommend that wine stored in a wine box is consumed within 6 months.

#### Storing Wine in Bulk.

As you build up stocks, it may be more convenient to allow your wine to mature in a bulk 23 litre (5 gallon) container. This is perfectly fine and wine actually matures better in bulk. It is important not to have too much air space in a bulk container. We would recommend adding a crushed campden tablet to the wine once it is filtered and syphoned into your container. Then immediately fit a sealed cap. You can purchase a safety cork to fit into a cap. This has a diaphragm which allows any pressure build up to be released from the container. This is useful if you are storing the container for lengthy periods where it is not in view. Avoid opening the container after it has been sealed until you are ready to consume the wine, then bottle or



syphon into a wine box. Do not use a bulk container for dispensing as once the cap is opened and an air pocket introduced, the wine will begin to deteriorate and the risk of bacterial contamination or oxidisation is raised.

### **DEVELOPING YOUR HOBBY**

As you progress and develop your winemaking skills, there are endless opportunities for experimenting and blending wines.

You may also wish to add fresh or dried fruits to a wine kit. Our staff are always happy to discuss ideas with you to enhance or tailor wine styles to your precise needs.

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You might also consider buying an air still or T500 distilling system, and to make your own Calvados or Brandy. There are a wide variety of flavours that can be purchased to convert your wine into liqueurs and by adding a spirit you can make fortified wines such as Port.



### **USING A HYDROMETER**



A hydrometer is an essential piece of equipment for winemaking. It effectively measures the amount of sugar in a solution (in our case the solution is wine). Hydrometers are calibrated so they provide a reading of 1.000 in water at 15 degrees Centigrade. Hydrometer readings are essential to measure the ABV of a wine and to confirm when fermentation has completed. Each point on the scale is referred to as a specific gravity point. Hydrometer scales typically range from 0.980 – 1.150.

The Specific Gravity of a liquid is that liquid's density compared to water. A liquid with a Specific Gravity of 1.085 is 1.085 times the density of water, for example.

To take a reading, put a sample of the wine into a trial jar and lower the hydrometer into it.

Position it vertically and read the level of the wine at eye level. You will note that the liquid seems to curve up a little at the edges where it meets the hydrometer. Try to read at the base line of the liquid (referred to as the meniscus).

Tip: If bubbles collect around the hydrometer, try spinning it between your thumb and forefinger to push the bubbles away.

If you are returning the drink to the batch or are putting the hydrometer directly into the fermenter, make sure the equipment has been pre-sanitised. Try to avoid taking too many hydrometer readings as fermentation progresses as this increases the opportunity for airborne bacteria to be introduced into the batch.

Take an initial reading at the point when you are about to introduce the yeast and the Wine (sometimes referred to as Must at this stage) is at fermentation temperature. This reading is called the original gravity (OG). Make a note of the reading for later use.

You should take another hydrometer reading when the fermentation process is complete. This is the point where CO2 has stopped bubbling through the airlock (alcohol will have been generated by this stage, so the batch is now referred to as Wine not Must). This reading is called the final gravity (FG) and should be close to 0.996. Take care when opening the fermenter lid to take readings and undertake the process as quickly as possible to minimise air contact. If a high reading is obtained (above 1.005) then this may indicate that the fermentation has not yet finished, or it has stuck (see problems to avoid).

### **PROBLEMS TO AVOID**

If you sanitise thoroughly, focus on maintaining the correct temperature for fermentation, and filter and transfer your wine promptly after fermentation has completed, then you will minimise the risk of wine spoilage and other issues. Below is a list of problems that may be encountered but these are extremely rare in our experience:

#### Fermentation not progressing.

Sometimes CO2 will escape around the side of your fermentation bucket rather than through the fitted airlock (make sure the airlock has water in it). Signs of fermentation are a foam on the surface of the wine in the early stages and CO2 being given off. Also falling hydrometer readings over 2 days should indicate sugar is being converted. If fermentation is not occurring it could be that the Must was too hot when the yeast was introduced, which has killed it. Alternatively check that the ambient temperature of the room and fermenter is not outside the tolerance of the yeast. If necessary, add a fresh sachet of Restart Yeast.

# Fermentation has finished but the final gravity (FG) is higher than expected.

Each kit will have a target Final Gravity which you should get close to. If the gravity has remained stable over 3 days at the end of fermentation, then the wine has effectively finished its fermentation. The more grape concentrate that is provided in the kit, the higher the FG will be. Some stronger wines may not ferment below 1.005 so do not worry. If you think that there is still residual sugar in the wine, then allow more time for fermentation to complete. If you experience a stuck fermentation, then the yeast may have been killed prematurely. This may be due to a spike in the temperature, or if the alcohol content is high towards the end of fermentation. Yeasts will have varying degrees of alcohol tolerance. To rectify the problem make a fresh yeast starter by adding one-third of the Wine Must to a glass. Then add two-thirds water at 24C (75F). Stir in a teaspoonful of sugar and a small squirt of lemon juice (to add a touch of acid). Then whisk a sachet of high alcohol tolerant Restart Yeast (such as Harris Restart Yeast) for 30 seconds and cover with a piece of kitchen roll. Leave in a warm place for around an hour until a head forms and there are visible signs that the fermentation has started. Then pour the starter into the bulk of wine and stir vigorously. Leave in a warm place (24C) for fermentation to continue. This technique should kick-start most stuck fermentations. If the fermentation is close to completion and a starter will not work, then a second option is to add yeast stopper, clear and filter the wine, then blend it with a drier wine. This will reduce the final sweetness.

#### Wine will not clear.

Most wine kits will include a sachet of wine finings, designed to rough clear your wine if it is left in a cool place. Finings are not a substitute for filtering, so it is important to pass your wine through a wine filter such as a Vinbrite Filter to achieve the ultimate clarity. If your wine does not clear after adding finings, it may be that the temperature is too high. Ideally store your wine at a temperature as close to 13C (55F) for clearing. Another issue may be that there is too much CO2 present in the wine when finings are added. It is important to 'degas' the wine at the end of fermentation after syphoning from the sediment. This can be done by stirring vigorously with a longhandled spoon for a few minutes. A degassing stick is available to buy as an accessory. Wine Must may contain pectin in varying amounts. This is more of an issue in Country Winemaking, but you can test its existence by taking a small wine sample and in a glass adding 1 part wine to 3 parts methylated spirit. After a short while any evidence of white particles or a string like residue indicates excess pectin. To resolve the issue, add a dose of Pectinaze to your wine and leave it in a warm place for a few days. Then add more wine finings and filter. This should result in a clear wine.

#### Wine tastes sour or vinegary.

Your Wine or Must may have become contaminated. This could be as a result of ineffective sanitisation or poor temperature control. Avoid lifting the lid frequently during/after the fermentation process as this could introduce a microbial airborne bacterium into the wine such as acetic bacteria. Unfortunately, contaminated wine needs to be discarded and all equipment deep cleaned/sterilised with Stericleen or similar before use. This problem is a rare occurrence.

#### Wine has a slight off-flavour.

The most common cause of an off flavour is due to the wine not being syphoned off the sediment promptly at the end of fermentation. Other causes can be ineffective sanitisation of equipment immediately prior to use.

#### Ropiness.

This is an extremely rare problem. The wine looks silky and shiny and has a thick appearance. When poured it looks oily. The cause is a bacterium of the lactic acid group. The problem can be treated by adding 2 crushed Campden tablets per gallon and stirring them into the wine vigorously. Leave for one week then syphon the wine from the sediment that will have formed. The wine will not be harmed or the flavour impaired.

# There is a strange white skin or flecks of white on the top of the wine.

This will have been caused by airborne bacteria (probably caused by wine being left too long in the fermenter after fermentation has ended and the bucket lid being removed frequently) or through poor sanitisation. Discard the wine and deep clean/sterilise all equipment with Stericleen before using again.

### **GLOSSARY OF WINEMAKING TERMS**

It can sometimes seem like another Language when winemakers are discussing their hobby. Therefore, it is worth knowing some of the terms and acronyms that are frequently used:

**ABV** - Alcohol by Volume. This is the final strength of the wine. Most kits will give a target ABV. Generally white wines have a lower ABV of around 10-11% and reds are slightly stronger (11-14%). Most kits will indicate a target ABV for their wine. An accurate measure can be made by taking a hydrometer reading at the start of the process before adding yeast (OG). Make a note, and then take a second hydrometer reading at the end of fermentation (FG). A more precise calculation can then be made to determine the actual ABV of your wine.

**Attenuation** - Attenuation refers to how well a strain of yeast converts sugars into alcohol. The attenuation rate of yeast is usually listed as a percentage. Visible signs of attenuation beginning are the appearance of yeast foam on the surface of your wine and airlock activity as CO2 is released.

**Brewing Sugar** - This is Dextrose Monohydrate. Dextrose brewing sugar, often referred to as "corn sugar" or "glucose" is recommended in place of household white sugar "sucrose" if you are required to add extra sugar to basic wine kits, or for Country Wines. Dextrose is faster to dissolve than white sugar and 100% fermentable. Brewing Sugar tends to ferment faster, more consistently, and is higher yielding compared to normal household sucrose-based sugars. **Filtering** - Filtering is the last part of the wine making process before bottling and is essential to achieve a professional finish. Filter systems allow wine to pass through porous pads which remove all dead yeast cells and other suspended particles. The presence of these particles might



otherwise be tasted in the final wine and would affect the clarity and appearance. Wine Filters are either gravity based or electric pumped. Although pumped filters are guicker, they are more expensive and not really efficient for smaller batch sizes of 5 gallons. The higher pressure they operate on can also force some of the smaller particles through their porous filter pad. The best option for home winemakers is a gravity/syphonbased system such as the Harris Vinbrite Filter. The filter is very easy to use and is highly effective for clearing 5-gallon batches. The wine is simply syphoned through the pad and the flow rate is controlled to ensure an effective contact time of the wine on the pad. The flow is not designed to be fast. Many winemakers start the filtering process before going to bed and allow it to complete overnight. Any small amounts of residual sediment at the bottom of the fermenter can be filtered to retrieve as much usable wine as possible. There is a myth that filtering detrimentally affects the flavour of the wine. This is completely false. Filtering only removes solid suspended colloidal particles, such as proteins and dead yeast from the wine. Their presence could be detected as off-tastes and would certainly adversely affect the final wine appearance and clarity. Virtually all commercial winemakers filter their wines and for good reason. You should too.

**Finings** - Finings can be added to wines to help clearing and to improve the efficiency of filtering. Traditionally finings have been made from isinglass but there are other types such as Chitosan (used more for white and rose wines as it can strip some of the colour in heavy reds) and vegan friendly finings such as Kieselsol.

**Gravity** - A measure of density of wine (effectively the amount of sugar in it). This is measured on a hydrometer.

**Must** - The term 'must' is derived from the Latin term vinum mustum, meaning 'young wine'. Must is the name given to the freshly pressed grape juice or concentrate. In some ultrapremium kits, the Must will also contain the skins of the grapes. Must is the first step in winemaking after the grapes have been harvested from the vine. The mixture will be thicker and may be opaque and will vary in colour depending on the grapes that are used, ranging from dark purple to light shades of brown. Wine kit manufacturers may use single grape varieties or a blend of different grapes depending on the type of wine they are making. Must will be fermented by yeast in your fermenter to produce alcohol. CO2 will be given off during fermentation, which normally passes through an airlock.

**OG** - Original Gravity. This is sometimes referred to as SG or Starting Gravity. It is the hydrometer reading that is taken immediately before adding the yeast and indicates the amount of sugar that is available to be converted into alcohol by the yeast.

**Sanitisation & Sterilisation** - Sanitisation is the most important element of home winemaking. The process is undertaken immediately before using equipment. The golden rule is that anything your wine touches should be sanitised. Sanitisation reduces any potential sources of microbial spoilage to irrelevant levels, which will minimise the risk of anything spoiling your wine. Today, no-rinse sanitisers such as Suresan are mostly used as they are highly effective, will not damage stainless steel equipment, and are kind to clothes and skin. Suresan can also be used to sanitise household items such as gym water bottles etc. To compliment good sanitisation practice, it is important to clean all equipment thoroughly after use, and before it is stored. Cleaning refers to removing yeast/sediment marks, dirt and other visible stains. This is the same level as washing crockery and cutlery. Everything you use during a brew should be spotlessly clean and free of stains or marks and stored dry. When cleaning plastic items avoid using hard scouring pads, or anything that might scratch the surface, as those small scratches are an ideal place for microbes to hide. If buckets or other equipment become scratched or split (including syphon tubes) it is best to replace them. A thorough washing is a precursor to sanitising, as sanitising agents alone will not be able to remove built up grime and deposits on equipment that harbour bacteria.

Sterilisation is a third process of killing all living organisms on a surface, such as surgical instruments in a dental surgery or hospital. This is not a level that is necessary or routinely undertaken in winemaking. Sanitising your equipment is the best way to ensure that even at the microbial level there shouldn't be enough to cause any infection. However, if you have been unlucky and have experienced an infection, we would recommend filling your fermenter with water and adding a dose of Stericleen, which is 99.9% effective in killing bacteria and microbial cells. Immerse all equipment into the solution and soak for a minimum of 4 hours. Be careful to avoid the solution touching clothes as it will take the colour and may irritate skin.

Thoroughly rinse equipment with cold water afterwards to remove traces of the steriliser. Stericleen can also be used for deep cleaning equipment and glassware. If necessary, it can be mixed with an oxi-based household cleaner for removing stubborn marks and stains.

**Sediment** - Yeast debris (dead yeast cells) and other particles will fall onto the bottom of the fermenter during the fermentation process. This is known as sediment. At the end of fermentation, it is recommended that your wine is syphoned from the sediment. Further sediment will subsequently fall as a result of adding finings and the clearing process. Your syphon tube will be fitted with a rigid sediment trap to avoid transferring sediment into bottles and secondary fermenters.

**SG** - Starting Gravity. This is another term for Original Gravity and means the same thing.

### WHAT'S IN THE BOX?

#### **Basic Wine Starter Kit:**



This is a value focused starter kit that contains all the basic equipment needed to produce a 5-gallon batch of wine. This starter does not contain a wine kit.

Kit contains:

- 1 x 27.5 Litre bucket
- 1 x LCD thermometer
- 1 x Airlock
- 1 x 250g Suresan No rinse steriliser
- 1 x Syphon Tube
- 1 x Flow Control Clip
- 1 x 14" Rigid Tube with sediment cup
- 1 x Bucket Clip
- 1 x Plastic Spoon
- 1 x Hydrometer

#### **Detailed List:**

**Suresan** - A no-rinse sanitiser to ensure that all equipment being used is clean and sterile. You do not need to rinse this sanitiser out with water.

**27.5 litre bucket** - large enough for a full 5 gallons with plenty of head space in case the contents froth during the ferment. The bucket lid is drilled and an airlock gasket fitted.

**LCD Thermometer** - A stick on thermometer is included to show you the current temperature of the contents inside the bucket. This is important to ensure that a constant correct fermentation temperature is achieved.

**Plastic spoon** - This large spoon allows the mixing of the contents easily and quickly and is used to aerate the beer once yeast is added.

**Airlock** - A bubbler airlock to allow the fermenting gasses to be released but stop air getting in the bucket. The airlock is simply filled halfway with water and fitted into the gasket in the bucket lid

**Syphon tube** - A food grade plastic tube that allows you to transfer the liquid from the bucket to another container. The syphon kit includes a rigid tube with sediment cup. This allows the tube to rest on the bottom of the bucket and helps reduce sediment from being carried over when transferring your beer. **Bucket clip** - keeps the syphon tube held in position against the inside wall of the bucket, freeing up a hand.

**Flow control clip** - Allows you to start and stop the flow of liquid. This is useful when filling bottles.

**Hydrometer** - Allows you to take specific gravity readings to determine when fermentation is complete and assess the ABV. This equipment is designed to last a very long time. You will need to replace the sanitiser when the contents have been used, but the equipment should last years if looked after carefully.

### MASTER YOUR CRAFT WINEMAKING STARTER KIT

#### Kit contains:

This starter kit contains everything included in the basic starter plus:

- ·1 extra 27.5 Litre Fermenting Bucket for transferring your wine
- ·1 x Digital Thermometer
- ·1 x Bottling Stick
- ·1 x Bucket Tap
- ·1 x Vinbrite Filter Kit
- .1 x Vinbrite Filter Support Bracket
- ·1 x Heatpad

#### **Detailed List:**

**One extra fermentation bucket.** It is essential to always have one spare bucket to hand for syphoning wines from the sediment at the end of the fermentation process. An extra bucket will also be necessary to filter your wine.

**Digital Thermometer**. This is a highly accurate probe style thermometer which provides a digital readout of water or wine temperature, in either Celsius or Fahrenheit. This is useful to ensure the correct temperature is achieved when adding yeast to the Must or checking fermentation temperatures. The digital thermometer will also be useful if you make country wines. **Bottling Stick.** This device attaches to tap on the fermenter and has a simple flow stop valve on the bottom so you can line up all your bottles and insert the stick into each one at a time. When the bottom touches the bottle the wine/beer flows. Simply lift it up from the bottom of the bottle and the flow stops. This can speed up the process of bottling wine tremendously. For the ultimate speed, also consider investing in a bottle washing pump and drainer. This will make the process of sanitising bottles a doddle.

**Bucket Tap.** One of the fermenters is supplied with a drilled hole at the bottom and a tap (note this is not pre-fitted to avoid possible damage in transit). This allows wine to be drained from the sediment without syphoning. It is also used with the bottling stick for easy bottling of your wines.

**Vinbrite Filter Kit.** The deluxe wine making starter is supplied with the world's bestselling Vinbrite Filter Kit. Every wine should be filtered before bottling to ensure the best quality and a commercial finish. The Vinbrite Filter is the preferred choice of wine filter by home winemakers throughout the world. It is easy to use and allows every drop of usable wine to be extracted from the sediment (formed from the finings process). The kit is supplied with three grades of filter pads and spares are readily available. The vast majority of winemakers that try the Vinbrite Filter continue to use it as a standard must-use for all of their wines.

**Vinbrite Filter Support Bracket.** This is an accessory which attaches to the side of the fermentation bucket and houses the Vinbrite Filter. There is a channel built into the support to ensure wine runs down the side of the fermenter, to minimise the risk of oxidising the wine.

**Heatpad.** This heating pad simply plugs into an electric socket and sits under the fermenter. It is efficient to use and raises the temperature of your wine by 8C. It ensures an even temperature for fermentation and allows you to make wine throughout the year. To achieve the best possible taste, it is important to avoid fluctuations and spikes in temperature. This may occur as a



result of domestic heating being switched on during the evening and off during the day. The heat pad avoids these issues and enables a constant temperature to be achieved in order to promote a healthy fermentation and avoid 'stuck fermentations'.



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