primary fermentation

Ensure that your primary fermenter is capable of holding at least 30 litres (8 US gallons) of volume. Pre-mark the primary fermenter at 23 litres (6 US gallons) by filling your 23 litre carboy with cool water, then pour or rack the water into the primary. Draw a line in permanent marker on the fermenter at the water level. This will be your fill level (below). Discard water and begin.

Clean and sanitise primary fermenter and lid, spoon, thermometer, hydrometer and test jar, and wine thief. Rinse thoroughly.

1. Add two litres (one-half gallon) of hot water to the bottom of your sanitised primary fermenter. Stir the water vigorously and slowly sprinkle the contents of package(s) #1 (bentonite) onto the surface. Stir for 30 seconds to ensure even dispersal, and to break up any clumps.

2. Secure the neck of the bag into the collar on the top of the box, carefully remove the cap, and pour the contents into the primary fermenter with the bentonite solution. Add 4 litres (one gallon) of warm water to the bag to rinse out any remaining juice, and add it to the fermenter.

3. Top up fermenter to the 23 litre (6 US-gallon) mark with cool water. Stir vigorously for 30 seconds.

NOTE: Making the kit to a full 23 litres (6 US gallons) is crucial to the functioning of the fining agents and stability of the finished wine. If you make it to any other volume, it will not turn out correctly, and any problems you may experience may not be solvable.

4. Draw a sample of the juice and use your hydrometer and test jar to check the specific gravity. It should read between 1.080–1.100, depending on the wine type.

5. If your wine kit contains oak or elderflowers, tear open the package(s) and sprinkle them into the primary fermenter now. If your kit has more than one package of oak, add them all. Stir them under the surface of the liquid.

6. Ensure that the temperature of the juice is between 18–24°C (65–75°F). Open your package of yeast and sprinkle it onto the surface of the juice. Do not stir.

7. After 5–7 days check the specific gravity. It should be 1.010 or less. You must rack (transfer) the wine into a 23-litre (6 US-gallon) carboy at this time. (Note: the lower your fermenting temperature, the longer it will take to reach this stage.) If your gravity is not at or below this level, wait (testing the gravity each day) until it is.

secondary fermentation

After 5–7 days check the specific gravity. It should be 1.010 or less. You must rack (transfer) the wine into a 23-litre (6 US-gallon) carboy at this time. (Note: the lower your fermenting temperature, the longer it will take to reach this stage.) If your gravity is not at or below this level, wait (testing the gravity each day) until it is.

Clean and sanitise siphon rod and hose, hydrometer and test jar, wine thief, carboy, bung and airlock. Rinse well.

1. Put the primary fermenter up at least three feet on a sturdy table.

2. Carefully siphon wine into a clean, sanitised 23 litre (6 US-gallon) carboy. Leave most of the sediment behind. This will leave a space at the top of the carboy. Do not top up at this stage. This space is required for stirring and additions during stabilising (step 3).

3. Attach airlock and bung to carboy. Remember to fill airlock halfway with water.

4. Leave carboy in fermentation area for a further 10 days.
3 stabilising and clearing

After 10 days, check your specific gravity. It should be 0.996 or less. Verify a stable gravity by checking again the next day. If the gravity has changed, leave the wine until the reading is stable on two consecutive days. **If you do not verify this reading, your wine may not clear properly!**

For **Luna Rossa** and **Luna Bianca**: these wines will not ferment below 0.998. This is normal. Once the gravity reaches 0.998 on two consecutive days, you can proceed with fining and stabilising.

Clean and sanitise hydrometer and test jar, wine thief and spoon. Rinse well.

**NOTES:**
A. Do **NOT** rack the wine before stabilising and fining. Selection kits require the sediment to be stirred back into suspension. Racking the wine off of the sediment prior to fining will permanently prevent clearing. Please be sure to stir all of the sediment up from the bottom.
B. Vigorous stirring is required during this stage. Without vigorous stirring, gas in the wine will prevent clearing. At each stirring, whip the wine until it stops foaming. Drill-mounted stirring devices (see your retailer) can save labour.

1. Dissolve contents of package(s) #2 (metabisulphite) and package(s) #3 (sorbate) in ½ cup of cool water. Add to carboy and stir very vigorously for 2 minutes to disperse the stabilisers and drive off CO2. Again, be sure to stir up the yeast sediment from the bottom of the carboy.

**IF YOUR KIT CAME WITH A SMALLER BAG (F-PACK)**
1. To ensure room in your carboy for the contents of the pack, remove 500 ml (two cups) of wine. Reserve this for topping up the carboy (step 3).
2. Shake the F-pack bag, carefully remove the cap, and gently pour contents into the carboy. Stir vigorously for 60 seconds. Your gravity will now read between 0.998 and 1.007 depending on the style of the kit.
3. Top up carboy to within 2 inches of the bottom of the bung. Use cool water, or reserved wine from F-Pack addition, if available. Topping up helps prevent spoilage. Ensure airlock is filled halfway with water and reattach bung and airlock. Leave the wine 8 days to clear.

4 racking and clarification

After 8 days your wine will be quite clear. This next racking will help to brilliantly polish it.

Clean and sanitise carboy, siphon rod and hose.

1. Rack the wine into a clean, sanitised carboy.

**NOTE:** Winexpert kits contain very low levels of sulphite compared to commercial wine. If you want to age your wine more than 6 months, you must add extra metabisulphite powder to prevent oxidation. To do this, dissolve 1.5 grams (¼ teaspoon) of potassium metabisulphite powder in 250 ml (½ cup) cool water and gently stir into wine in the clean carboy. This extra sulphite will not affect flavour or early drinkability.

2. Top up carboy to within 2 inches of the bottom of the bung. Use cool water or, preferably, a similar wine. Ensure airlock is filled halfway with water and reattach bung and airlock. Leave the wine 14 days to finish clarifying.

3. After the 14 days, check your wine for clarity by drawing a small sample into a wineglass and examining it in good light. If it is not completely clear, leave for another 7 days. Do not bottle cloudy wine: it will not clear in the bottle. If you wish to filter your wine, please contact your retailer for assistance.

5 bottling

Clean and sanitise 30 wine bottles, siphon rod, hose and siphon filler. Rinse well.

**NOTE:** If you are concerned about disturbing the sediment on the bottom of the carboy when bottling, clean and sanitise a primary fermenter or carboy, rack the wine into it, and bottle from there.

1. Siphon your wine into clean, sanitised bottles and seal with a good quality cork. Be sure to leave two finger-widths of space between the bottom of the cork and the level of the wine in each bottle.

2. Leave bottles upright for three days before laying them on their sides for aging, to allow the corks to seal. Store bottles in a dark, cool, temperature-stable place.