primary fermentation

Ensure that your primary fermenter is capable of holding at least 15 litres (4 US gallons) of volume. Pre-mark the primary fermenter at 11.5 litres (3 US gallons). 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. Grasp the neck of the large bag firmly, carefully remove the cap, and pour the contents into the primary fermenter with the bentonite solution. Add 2 litres (½ gallon) of warm water to the bag to rinse out any remaining juice, and add it to the fermenter.
3. Top up fermenter precisely to the 11.5 litre (3 US gallon) mark with cool water. Stir vigorously (as hard as possible) for the full 60 seconds.

NOTE: Making the kit to a full 11.5 litres (3 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. Vigorous stirring is also necessary to prepare for yeast growth—stir hard for the full 60 seconds.

4. Draw a sample of the juice and use your hydrometer and test jar and check the specific gravity against SPECIFIC GRAVITY BY STAGE.
5. If your wine kit contains oak, open the package(s) and sprinkle the contents 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(s) of yeast and sprinkle contents onto the surface of the juice. Do not stir.
7. Cover the primary fermenter and place in an area with a temperature of 18–24°C (65–75°F). Fermentation should start within 24-48 hours.

SUGAR ADDITION FOR PORT AND CREAM-STYLE SHERRY ONLY:

After 5–7 days use the following procedure to add sugar to your kit before going to secondary fermentation. The yeast will ferment this sugar, providing the extra alcohol content needed to achieve a balanced wine for Port and Cream Style Sherry. For all other kit types, including Dry Sherry, skip this step and after the 5–7 days, proceed to Secondary Fermentation, (Step 2). Clean and sanitise hydrometer, test jar, wine thief, heat-proof measuring cup and spoon. Rinse well.

SUGAR ADDITION PROCEDURE FOR PORT AND CREAM SHERRY:

I. After 5–7 days take a sample of the wine and use your hydrometer and test jar and check the specific gravity. If it is below 1.015, make your sugar addition. If it has not reached this reading, leave the wine, checking the gravity each day, until it reaches this level, before proceeding.
II. In a heat resistant container dissolve 450 grams (1 lb., approximately 2 cups) of corn sugar in 175 ml (¾ cup) of hot water. Stir gently until sugar is completely dissolved. You may substitute 450 g (1½ cups) granulated table sugar if you wish.
III. Add the solution to the primary fermenter and stir very vigorously for a full 60 seconds. Make sure to stir up the yeast from the bottom of the fermenter. Take another S.G. reading. It should read between 0.010 and 0.015 points higher than the previous reading (see SPECIFIC GRAVITY BY STAGE).
IV. Cover the primary fermenter and allow approximately 5-7 more days for the wine to reach secondary S.G. (see SPECIFIC GRAVITY BY STAGE) before proceeding to Secondary Fermentation, (Step 2).


### 2 secondary fermentation

After 5–7 days check the specific gravity against the SPECIFIC GRAVITY BY STAGE.

Before proceeding, clean and sanitise siphon rod and hose, hydrometer and test jar, wine thief, 11.5 litre (3 US gallon) carboy, bung and airlock. Rinse well.

You must rack (transfer) the wine into an 11.5-litre (3 US gallon) carboy once the wine is at or below the number listed for Secondary Fermentation.

**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.

1. Put the primary fermenter up at least 1 metre (3 ft.) on a sturdy table
2. Carefully siphon wine into a clean, sanitised 11.5 litre (3 US-gallon) carboy. Leave most of the thick sediment behind. This will leave a space at the top of the carboy.
   - Do not top up at this stage. This space is necessary for stirring and additions during Stabilising and Clearing (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.

If wine is clear after 14 days, you are ready to proceed to Stage 4.

### 3 stabilising and clearing

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

After 10 days, check your specific gravity against the SPECIFIC GRAVITY BY STAGE. Verify a stable gravity by checking again the next day. If the gravity changes, or has not reached the correct level, leave the wine until the reading is stable on two consecutive days.

**If you do not verify this reading, your wine may not clear!**

**NOTE:**

- Do **NOT** rack the wine before stabilising and clearing. Selection Spéciale kits require the sediment to be stirred back into suspension. Racking the wine off of the sediment prior to fining may permanently prevent clearing. Please be sure to stir all of the sediment up from the bottom.
- Extremely vigorous stirring is required at this stage, to drive off carbon dioxide gas. Without vigorous stirring, the gas may prevent the finings from clearing the wine. In addition, the wine may be “fizzy” after bottling if not sufficiently stirred. When directed to stir, 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 125 ml (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.
2. Shake contents of package(s) #4 (chitosan or isinglass clarifier). Carefully cut open the corner of the pouch(es) and pour contents into carboy. Stir vigorously for another 2 minutes to drive off CO₂ gas. (See note above: your wine may not clear if this stirring is not vigorous enough.)
3. Top up carboy to within 5 cm (2 inches) of the bottom of the bung. Use cool water or reserved wine from the F-Pack addition. Ensure airlock is filled halfway with water and reattach bung and airlock. Leave the wine 14 days to finish clarifying.
4. 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.

### 4 bottling

Clean and sanitise 30 - 375 ml (12 fl. oz.) or 15 - 750 ml (25.4 fl. oz.) wine bottles, siphon rod, hose and siphon filler. Rinse well.

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

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 to prevent oxidation. Clean and sanitise a primary fermenter or carboy and rack the wine into it. Dissolve 1.5 grams (¼ teaspoon) of potassium metabisulphite powder in 125 ml (½ cup) cool water and gently stir it into wine. This extra sulphite will not affect flavour or early drinkability.

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 and temperature-stable place.

**Your wine will benefit greatly from extended ageing in the bottle. Try to wait at least six months before you try your first sample—but a year is better.**

Enjoy!

Questions? Comments? Contact us at info@winexpert.com

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