

# NECESSARY EQUIPMENT

**1. Primary Fermenter:** Food grade plastic bucket of at least 30 litres (8 US GAL.) capacity. Use a loose lid to cover or a tight fitting lid fitted with a fermentation lock and stopper or a plastic sheet tied down.

**2. Carboy:** 23 litre (6 US GAL.) glass or plastic, narrow necked container. Glass is preferred.

**3. Fermentation Lock & Rubber Stopper:** The fermentation lock is designed to prevent bacteria and oxygen from getting into your wine, while allowing carbon dioxide gas produced during the fermentation to escape. Remove cap and half-fill lock with water. Replace cap and fit rubber stopper with lock into carboy neck. Dry the inside of the carboy neck with a paper towel to ensure a snug fit.

**4. Mixing Spoon:** Food grade plastic stirring utensil 70 cm (28") in length.

**5. Wine Thief:** Use to take out samples from the primary and carboy.

**6. Hydrometer:** A hydrometer measures sugar – either its presence OR its absence. During fermentation, high Specific Gravity (or density) sugars are being converted to lower Specific Gravity alcohol. The hydrometer records this change and allows you to determine:

- potential alcohol
- how fermentation is progressing
- when fermentation is complete

**7. Siphon Hose & Racking Tube:** Use for transferring the wine from one container to another while leaving the sediment behind.

# TIPS FOR SUCCESS

**1. Sanitation:** It is absolutely essential that everything that comes in contact with your wine is clean and sanitized. You may clean and sanitize equipment (except filter) with a chlorine base cleanser such as Chloriclean. This will remove harmful bacteria. After sanitizing, rinse equipment well with clean water at least 4 times.

**2. Temperature:** If the temperature of the fermenting wine is above 29°C (85°F), the yeast will be inactivated. Temperatures below 18°C (65°F) will slow down the fermentation process. Do not use a heating belt or pad if room temperature is above 18°C (65°F).

**3. Sediment:** Care must be taken not to stir the settled sediment back into the wine during racking and bottling. The use of a siphon hose attached to a rigid racking tube with an anti-lees tip is very helpful. A racking tube holder which clips on to the side of the fermenter also helps to eliminate the movement of the racking tube in the wine.

**4. Topping Up Wine:** It is essential to top up your carboy into the neck. This will reduce the surface to air ratio, which may lead to oxidation. Use water which has been previously boiled then cooled. If you would like a fuller bodied wine, you may top up the carboy with a previously made wine.

**5. Use of the Hydrometer:** A wine hydrometer is very useful in following the progress of the fermentation.

**6. Stabilizing:** Trapped carbon dioxide must be removed from the wine from the fermentation process to allow the clearing agent to work properly. Be sure to stir well. Your Wine Kitz store sells a stirring device that attaches to an electric drill to simplify the stirring process.

**7. Clearing:** The clearing agent may create an electrostatic charge causing some suspended particles to cling to the sides of the carboy. After 5 days give the carboy a sharp twist. Occasionally, the wine may not clear completely in the allotted time. Just leave it in the carboy for another week or so. If the problem persists, your Wine Kitz Consultant can advise you.

**8. Aging:** The ideal temperature range for aging is 11°C – 18°C (52 – 65°F). If the wine is stored above this range, avoid extended aging.