

OVERVIEW OF THE WINEMAKING PROCESS

Official NORTHERN BREWER Instructional Document

The following is an overview making a batch of wine from a typical wine concentrate kit - always closely follow the manufacturer's instructions that come with the wine concentrate kit.

PREPARING THE MUST

- **SANITIZE EQUIPMENT.** Mix a sanitizer solution and sanitize the 7.9 gallon bucket and lid (the primary fermenter), plus the fermentation lock and the plastic paddle. All surfaces that will touch the must (unfermented wine) need to be sanitized. See the section titled "Sanitation" for more details.
- **MIX THE JUICE/CONCENTRATE WITH WATER.** Mix the juice and/or concentrate in the kit with good-quality drinking water in the sanitized primary fermenter - refer to the instructions that came with the kit for proportions. Add additives (Bentonite, oak powder, etc.) as called for by the kit instructions. Mix the must thoroughly with the sanitized plastic paddle.
- **TAKE A HYDROMETER READING.** Take a hydrometer reading and record it. See the section titled "Using a hydrometer."
- **ADD YEAST TO THE MUST.** Dry yeast can be sprinkled directly on the surface of the must without further preparation.
- **SEAL THE FERMENTER.** Fill the S-shaped fermentation lock with a small amount of water (about a tablespoon), and insert it into the small grommeted hole in the bucket lid. Place the fermenter in an area where the temperature is consistently 65-75° F.

PRIMARY FERMENTATION

During fermentation the yeast converts the sugars in the must into alcohol and carbon dioxide. Fermentation should begin within 48 hours, indicated by gas bubbles escaping the airlock. Primary fermentation usually lasts from 7 to 10 days, depending on ambient temperature, the yeast strain, and the wine - your mileage may vary. When fermentation subsides (indicated by gas bubbles in the airlock slowing or ceasing), take a hydrometer reading and proceed with racking as directed by your kit instructions.

RACKING & SECONDARY FERMENTATION

Racking is the vintner's term for transferring wine from one vessel to another. It's necessary to rack the wine after primary fermentation in order to separate it from the lees (the layer of sludge at the bottom of the fermenter, made up of grape solids and dead or dormant yeast cells). The young wine is racked from the primary fermenter to the secondary fermenter.

During secondary fermentation, the wine will improve in clarity and flavor; there may or may not be a brief renewal of bubbling in the airlock as the yeast consumes any remaining sugar in the must. It's important to minimize air contact as much as possible from this point on; the wine should be siphoned without splashing and stored in a carboy filled close to the top.

- **SANITIZE EQUIPMENT.** Sanitize the six gallon carboy, carboy bung, airlock, and the siphoning equipment.
- **RACK THE WINE.** Siphon the wine from the primary fermenter into the secondary, being careful to splash it as little as possible. See the section titled "Siphoning" for more details.
- **ADD ADDITIVES.** Refer to the kit instructions for any stabilizers or finings to be added at this point.

Some kits may call for a subsequent racking of the wine to aid in clarification and separation of the wine from the solids - this can be done by adding a second 6 gallon carboy to your system, or by cleaning out and re-sanitizing the included six gallon carboy while the wine is temporarily held in another sanitized vessel.

BOTTLING

Once the wine is clear and has been stabilized it's ready to be bottled.

- **SANITIZE BOTTLING EQUIPMENT AND BOTTLES.** Assemble and sanitize the bottling bucket, Auto-Siphon and siphon tubing, the bottle filler, the 3/8" tubing, and the wine bottles.
- **ADD FINAL ADDITIVES.** Refer to kit instructions for any additives to be added to the wine at bottling.
- **RACK THE WINE INTO THE BOTTLING BUCKET.** First make sure the spigot on the bottling bucket is in the "off" position, then siphon the wine from the carboy into the bottling bucket.
- **ATTACH THE BOTTLE FILLER.** Lift the filled bucket onto a counter. Connect one end of the 3 foot length of 3/8" tubing to the bottle filler, and the other to the spigot.
- **FILL AND CORK THE BOTTLES** Open the spigot to the "on" position, insert the bottle filler into the bottle, and push it all the way to the bottom. Fill the bottle almost to the very top, then lift the filler up. This will close the valve on the bottle filler, and stop the flow of wine into the bottle. When you remove the filler from the bottle, you will be left with about two inches of head space, which is ideal. If you have two people, pass the bottle to your partner, who will cork the bottle. If you are working alone, set the filled bottle aside and seal it once you are done filling bottles.

CORKING WITH THE FLOOR CORKER (DELUXE): Pull the corking lever all the way back - this will open the iris jaws that compress the cork, and unlock the bottle platform. When the lever is pushed down, the iris jaws will close and the bottle platform will lock in place.

- Place a filled bottle on the bottle platform. The mouth of the bottle should be centered underneath the opening through which the cork will be pushed, and the lip of the bottle should be resting against the metal guide.
- From the top of the corker, load a cork in the iris chamber.
- Push the lever down all the way to push the cork into the bottle with the plunger. Pull the lever all the way back to unlock the bottle platform, and remove the corked bottle.
- If necessary, adjust cork depth by moving the circular nut up or down the threads on the plunger.

CORKING WITH THE DOUBLE-LEVER HAND CORKER (BASIC): Load a cork in the chamber of the corker.

- Once loaded, center the corker over the bottle, and push down both levers. The corker's jaws will grip the bottle neck, and the plunger will push the cork into the bottle.
- You can adjust the depth of the plunger stroke using the two nuts at the top of the corker, above the plunger.

Natural corks can be softened and lubricated, if necessary, by dipping them in lukewarm water right before corking; sulfite is optional. Do not soak corks.

CONDITIONING AND STORAGE

After the bottles are corked, stand them upright for three days. This allows the air that was pushed into the bottle by the cork to seep back out and the bottle pressure to equalize. After three days, the bottles can be laid on their sides for long term storage.

Bottles to be cellared should be stored neck-down or flat to keep the corks from drying out. Keep the bottles in a cool, dark, humid spot.

ENJOYING

Uncork the bottle and gently pour the wine into a clean glass. Watch the bottle carefully when pouring, as you may wish to leave behind the wine at the very bottom of the bottle. Sediment will collect at the bottom of the bottle, which will cloud the wine in the glass. Enjoy the aroma and flavor of your handcrafted wine. Repeat as necessary.