

"Serving the Winemaker Since 1964" (814) 725-1314 www.piwine.com

## **Beginners' Checklist**

Both the choice of equipment and the vocabulary of winemaking may seem confusing to the beginner. Reading our catalogue or browsing our <u>online supply store</u> will help with your vocabulary while the following checklist may help you choose from among those items which are necessary, those which are desirable and finally, those which are just nice-to-haves.

- ✓ **Basic Information:** We strongly recommend that you use a book; it will be your best investment as a beginning winemaker. Our own *PIWC Beginner's Book of Winemaking* is a good and sufficient basic primer. For more complete books we recommend *Grapes into Wine* by Philip Wagner or the more technical *Modern Winemaking* by Philip Jackisch. There are many other texts available which will provide you with the needed background; even mediocre books are better than none at all.
- We much prefer grapes but there are many fruits that can work as well. If you start with your own fruit you will need a crusher and press. Try to borrow or rent one until you are sure you are in winemaking to stay since they are expensive. We rent these items to those close enough to come to the winery and provide on-site use of them free of charge to those who purchase grapes from us. You won't need either item if you purchase juice or concentrate. We offer <a href="fresh grapes and juice">fresh grapes and juice</a> from local vineyards at the winery during the fall harvest, typically from mid-September through October. A new product for 2013, we will be offering <a href="fresh Italian Juice">fresh Italian Juice</a> at the end of our fall harvest. We also offer <a href="fresh Chilean Juice">fresh Chilean Juice</a> in the Spring, typically in late April. We also offer a small assortment of <a href="concentrates">concentrates</a>. Other essential items are covered below. Beginners might want to consider a <a href="winemaking kit">winemaking kit</a> that combines all the basic equipment you will need into a convenient and economical package.
- ✓ **Containers:** Five gallon glass water jugs (<u>carboys</u>) are the preferred container. They are easy to clean and don't deteriorate in storage or interact chemically with the wine. You will also be able to observe the fermentation. Three, six and seven gallon carboys are alternatives. One gallon jugs require more care because of the risk of oxidation. Beer kegs also make good containers. Plastic containers should be used only for short term storage because of their permeability to air. <u>Barrels</u> can impart wonderful characteristics and oak flavors to your wine but are quite expensive and small size

barrels (less than 30 gallons) offer mostly problems - they often leak, evaporation losses may be 10% per year , and with small barrels the surface area to volume ration is too high. Most amateur winemakers should avoid barrels unless you can take the time to care for them properly, have room for and can handle larger sizes, and are willing to make the sizable investment to purchase them. The use of <a href="mailto:barrel alternatives">barrel alternatives</a> such as oak chips or oak spirals is a quite reasonable and economical alternative to aging in small barrels.

- ✓ Air Locks: These devices let gas escape from your fermenting container, but shield it from atmospheric oxygen. They work like a sink trap. Air locks should be used with a rubber bung to fit the opening of your container. Tapered corks or rubber caps may also be used with them. There are also screw cap lids for gallon jugs which will hold an air lock.
- ✓ Chemicals: Few chemicals are needed with grape wines. A source of sulfur dioxide SO₂ (either potassium metabisulfite or campden tablets) will be of great value. Tartaric acid is needed with some low acid grapes from California and calcium carbonate (chalk) or potassium bicarbonate will help when you have high acidity. Potassium sorbate inhibits fermentation in sweet wines, but must be used with sufficient SO₂ to avoid the risk of developing an off 'geranium' odor. Most other fruits will need pectic enzymes and yeast nutrients or yeast ghosts. Tannin or a fining agent may be needed if the wine doesn't clear properly on its own.
- ✓ **Yeast:** Wine yeast cultures offer several advantages over the wild yeasts normally found on the fruit, namely the ability to ferment at cooler temperatures, greater alcohol efficiency and more compact less easily disturbed lees. Several different strains with similar, but slightly differing characteristics are stocked. They are quite inexpensive.
- ✓ Cleaning and Sterilizing: Sal Soda (washing soda) is as good as anything. We stock it now that you can no longer get unscented material in a grocery store. Wineries often use proprietary alkaline cleaners based on sal soda and tri-sodium phosphate. The use of regular detergents is ok, but you may have a lot of suds. Brushes such as we sell are good for reaching into odd corners to reach difficult soils. Sodium hypochlorite (laundry bleach) can be used to sterilize inert materials, but a solution of potassium metabisulfite in water is better to use before bottling.
- ✓ **Instruments:** If you purchase juice or concentrate from us we will provide you with sugar and acid readings so you won't have to purchase any instruments. Otherwise you will need a <a href="https://hydrometer">hydrometer</a> and often an <a href="acid test kit">acid test kit</a>. A <a href="https://hydrometer">Free SO<sub>2</sub> test kit</a> will also be quite helpful. Other instruments provide interesting data, but aren't as critical in helping you make better wine.

- ✓ Transferring Wine: During the winemaking process it will be necessary to transfer your wine
  between containers. To prevent unnecessary agitation and aeration, wine should be siphoned, not
  poured. You will need about five or six feet of food grade plastic tubing or a <u>PIWC Bottling Siphon</u> or
  similar apparatus.
- ✓ **Clarifying:** Removing impurities and suspended solids from your wine is essential to making a clear, appealing looking wine. Time can be a potent and economical clarifying agent if you have the time and patience to let your wine settle naturally and rack it two or three times. <u>Clarfying agents</u> such as Bentonite or Sparkolloid will help clear your wine much faster and more thoroughly than just settling. A <u>filter</u> is convenient and can produce stunningly clear wines in a much shorter time, but is a significant investment and is not necessary for most home winemakers.
- ✓ **Bottling and Storage:** Our <u>PIWC Bottling Siphon</u> is convenient and handy, but a plain piece of tubing will also do, with or without a valve. Gallon jugs can be used if your family consumes a lot of wine, but most will find the 750ml bottle more practical. We do carry <u>wine bottles</u> but home winemakers can save money by saving and re-using bottles you have drunk. Avoid using bottles with bastard threads or with flared necks too short to properly seat a cork. Use <u>corks</u> if more than a year of bottle aging is likely, otherwise you can use 28 mm <u>screw caps</u> or <u>plastic top corks</u> (T-corks). You will need a <u>corker</u> to insert the regular wine bottle corks.
- ✓ **Ideal Cellar Conditions:** Ideal conditions include cool and even temperatures, protection from direct sunlight, fairly high humidity and freedom from foul odors. The perfect facility is hard to come by, but it will pay you to try and come as close as you can. If nothing else, insulate a corner of your cellar and try to avoid areas where temperatures exceed 80 degrees Fahrenheit.