PRESQUE ISLE WINE CELLARS

"Serving the Winemaker Since 1964"

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Basic Winemaking Terms & Tips

Definitions & Tips: Not all-inclusive but hopefully helpful. Email us your favorites; maybe we'll include them in the next edition.

Acid Reduction - Reducing the acid in juice or wine to an acceptable level. It is usually measured as tartaric acid and requires a testing apparatus and reagents. Good levels are typically in a range of 0.6 to 0.8 percent acid, depending on the wine. More technically the reading is read as grams per liter. Therefore 0.6 percent would be 6.0 g/l.

Acidulation or Acidification - Raising the acid level of juice, wine or sometimes water by adding some type of acid increasing additive or blending with a higher acid juice or wine.

Acidified or Acidulated Water - Water to which acid (most commonly citric acid) has been added. It is a way to reduce sugar in a juice that is too high in sugar without diluting (thus reducing) the acid level of that juice.

Additives - Things added to wine to enhance quality or possibly fix some type of flaw. There are many additives for many situations and it is wise to gain at least some basic knowledge in this area.

Alcohol - Obviously one of the significant components of wine. Yeast turns sugar to alcohol. Rule of thumb says for each percentage of sugar in a non-fermented juice, the alcohol will be half. For example 21% sugar should ferment out to an alcohol level of about 11.5 to 12%.

Always - Keep containers full to the brim (exception is during vigorous fermentation). Watch barrels closely as they allow considerable evaporation and need to be topped-off regularly (every week or two).

Always - Store wine long term in an acceptably inert container like glass, stainless steel, special plastic or proper oak barrel. Never store wine long-term in common plastic (very short term is okay).

Always - Find out first if a flawed wine can be fixed before discarding it. This is so important it is repeated below in the 'N' section.

Amelioration - It means to make better and almost always is in reference to adding sugar-water to juice in order to reduce acid that is too high. This practice is often used on native-American varieties such as Concord. Remember the trade-offs!

Chaptalization - Adding sugar to juice that may be too low in natural sugar to ferment to the desired alcohol level. Regular cane sugar is most often used.

Destemming or Stemming - Separating grapes (or other fruit) from the stems. This is desirable if you are going to ferment 'on-the-skins' but not at all critical if doing white wines that will be pressed right after crushing. Leaving the stems in while pressing white juice can be quite good. **Fermentation -** The process by which yeast (cultured or wild) changes sugar (natural & added) in juice to alcohol, therefore creating wine.

Fermentation On-The- Skins - After having broken up the fruit (usually grapes), separation of juice from solids is delayed. Yeast ferments the juice in the presence of the skins. It is from the skins that color (and other things) is/are extracted to produce true red wines. This is usually done for four to five days before a pressing separates the liquid from most of the solids.

Fining Agent - An additive used to help a wine clarify.

Malo-Lactic (M/L) Fermentation - A special fermentation (called M/L for short) that is sometimes very desirable but sometimes very undesirable, depending on the style of wine. It is a bacterial fermentation over and above the yeast fermentation. It can happen on its own or the wine can be purposely inoculated. <u>If M/L is undesired, be sure to use proper amounts of sulfur dioxide.</u> Must or Lees - See definition for sediment.

Never - Never discard a wine without first finding out what the possible flaw is. Flaws can often be fixed.

Potassium Sorbate - Often just called sorbate or sorbistat. It is used <u>after</u> fermentation in sweet wines to prevent fermentation from starting up again. The goal is to have residual sugar so the wine stays sweet. <u>Never let a wine with sorbate go through a malo-lactic</u> fermentation after the addition of the sorbate.

Racking - The process of siphoning or pumping juice/wine off the sediment that has settled on the bottom of the container. Usually one should only rack two or three times. **Avoid over-racking**.

Re-hydrate or Pitch Yeast - Preparing a dry yeast in warm water at minimum or warm water with some other additive to 'get it going' before adding it to juice.

Residual Sugar - Sugar that is left over (not fermented out) in a wine. It remains there as part of the taste. It may be added or naturally occurring (such as in late harvest & ice wines). <u>If residual sugar is desired and needs to be added, do so after fermentation.</u> **Rule of Thumb -** A measurement or practice that gives pretty good results without having to invest excess money into measuring devices or other laboratory ware. Knowing some common ones is not perfect but, short of spending on test equipment, it is better than total guesswork. **Sediment -** Also known as 'lees', 'must' or 'mud', it is the solid material that settles to the bottom of a juice/wine container. The clearer

juice/wine on top is siphoned or pumped off this mud to remain clear. Sometimes in red wines especially there may remain some sediment requiring decanting.

Sugar Test - A very important test to conduct in juice **before any fermentation**. It is sugar level that determines alcohol level. If you don't know the natural level of sugar you won't know how much sugar to add (if any).

Sugar Water - Water that has had sugar mixed in usually for the purpose of reducing a high acid juice without reducing the sugar level of that juice. 1.7 lbs. (1 lb. 11 oz.) of sugar + water for the two combined to equal one gallon gives a solution that is 21% sugar. Rule of thumb says 21% sugar will ferment out close to 11.5 % to 12% alcohol.

Sulfur Dioxide - Commonly known as SO_2 . It is arguably the single most important additive to use in wine. It is a wine 'protector'. Get familiar with its proper usage. The pH of a wine affects the level of SO_2 needed. 'Rule of Thumb' use is $\frac{1}{4}$ tsp. Per five gallons at each of two maybe three rackings.

Table Wine - Legally defined by the federal government as a still wine that has an alcohol level below 14%. Most table wines are in the 11-13% range. Most 'fruit wines' are best at about 10% alcohol

Trade Off - You likely don't need a definition but it is important for the winemaker to remember that doing something to a juice/wine may affect something else and a decision must be made as to whether the trade-off is worth it.

Wine - a liquid that has its sugar partially or fully converted to alcohol by yeast fermentation. Purists (and even the federal government) reserve the term 'wine' solely to that which is made from grapes. Purist might say that is where the definition ends. Others including the government may just assign some additional terminology. Just two other government definitions include 'fruit wines (other than grapes)' & 'citrus wines'.