

Port Style Wine: Simplified

STEVE HELSPER

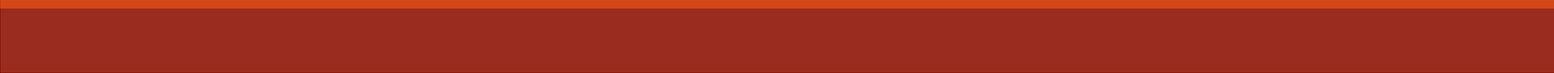
ALL IN ONE WINE PUMP



What are the origins of Port?

- Port Wine gets its name from Portugal and the city of Oporto where it originates from
- After centuries of trading with the British, it was found that fortifying the wine with **High proof Brandy made from grapes** allowed for it to better survive the long voyage to Britain
- Because of how long it sat in the oak barrels, an oaky flavor has become a trademark of Port
- The name “Port Wine” can only be on a bottle if it comes from Portugal

What is Port generally like?

- Warm to the taste
 - Very heavy bodied
 - Not diluted with water or sugar
 - Higher alcohol than wine (18-22%)
- 

Varieties of Port Wines

- White Port:
 - Ruby Port:
 - Young Tawny Port:
 - Aged Tawny Port:
 - Late-bottled Vintage Port (LBV):
 - Traditional LBV: Similar to LBV
 - Vintage Port:
- 

Where to start

- Everclear is good for fortifying the wine
- Let activated carbon (distillers grade) sit in it for a week prior to next step
- Making your own pure alcohol isn't worth the effort- trust me on this one

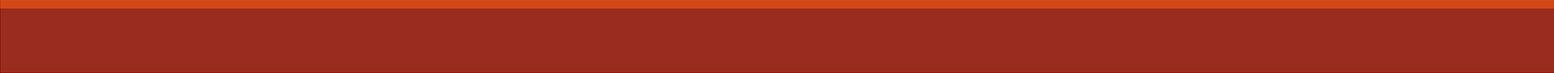


Next Steps

- After filtering out the charcoal, add oak chips. This will give a flavor similar to Brandy
- Allow to sit for about 2 weeks
- Over the last 4 days shake several times a day



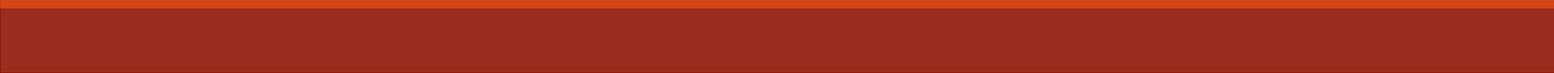
How much alcohol will I need?

- Use the 10% rule
 - Make wine with a 10% ABV
 - Calculate the Everclear to the wine until its roughly 20% ABV
 - Example = if you had 20 bottles (4 gallons), divide by 10, you'll need 2 bottles of Everclear, to increase it by 10% (ABV).
- 

How much grapes will I need?

- This will depend on the type of grape and their sugar content
 - Previously I have used a full 6 gallon pail full of juice and skins and at the end I had 4.0 gallons of Port
 - This was with the addition of 2 bottles of 'Everclear'
 - Some of the losses are because of transferring in order to clear the wine
 - Total starting weight of grapes was 55 lbs.
- 

Days 1-3

- Put the fresh grapes through a crusher/de-stemmer
 - Refrigerate for 3 days at roughly 50 degrees
 - This will help to pull out the tannins and flavor before pitching the yeast
- 

Days 1-3 : How to keep the grapes cool

- A freezer with an electronic thermostat is ideal
- Can also use frozen 1 gallon jugs of water to keep the mix cool
- Use 2 jugs and rotate them every 12 hrs
- Temperature should be around 50* F



Day 4

- Add pectic enzyme to the grapes
 - Place a jug filled with hot water in the grapes to raise up their temperature
 - Measure the potential alcohol and adjust with sugar if needed
 - This year my Frontenac was at only 11%, and I brought it up to 15% potential alcohol (due to all the rain)
- 

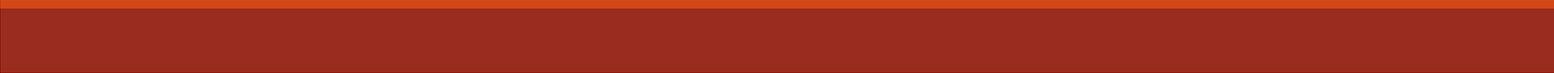
Adding the Yeast

- Remove hot water jugs only once the temperature reaches 80 degrees
 - Make a batch of the yeast starter – I used 71b-1122
 - After fermentation starts I add fermaid K
- 

Adding the Yeast cont.

- It takes about 48 hours from pitching the yeast till the potential alcohol will reach 6%
 - At this point, that means its 9% alcohol if you started with a 15% potential
 - During this time, keep pushing down the cap several times a day
- 

Winemaker's Notes

- The object of making Port is to fortify at the correct residual sugar content (winemakers choice). I like around 3-4%
 - By the time the pressing occurred, I was left with 3% residual sugar, which means the ABV was at 12% since I started with 15% potential
 - Take all all the skins and any extra juice (after pressed) and put it in the 1st run of wine and it will increase the body and color of the wine.
- 

Winemaker's Notes

- Fermentation can happen extremely fast, make sure to keep a good eye on your hydrometer
 - It's best to press early and wake up in the middle of the night to check it
 - All you have to do is add the alcohol to stop the fermentation and go back to bed
 - Start your wine and port approx 8 -12 hours different from each other, better window to make port from. In case the 1st one is missed.
- 

Winemaker's Notes

- It's best to add the alcohol to the wine only – otherwise it can be soaked up with the skins
 - Do not use a plastic funnel to pour the high proof alcohol into the carboy, it can melt!
 - If you need to, dilute the alcohol with the wine and then pour it in, using a funnel. Make sure that the woodchips also go into the carboy
 - All fermentation will stop within minutes of adding the alcohol
 - Add all oak chips to the port as they are soaked with pure alcohol
- 

Winemaker's Notes

- After some time the wine will start to clear on its own
 - Wait a minimum of 6 months before bottling
 - As it ages, the Ports flavors will only improve over time
 - The hotness of the alcohol, however, will settle down with aging
 - No need to add sorbate because all the yeast has been killed off
 - The port I brought to the meeting was bottled in 6 months and aged 6 months. Yes - a very young port, but extremely tasty.
- 

Winemaker's Notes

- Advantages compared to other process, like adding sugar to increase ABV
 - You keep the natural qualities of the grapes and sweetness and the complete mouth feel and body
 - It is not diluted with 60% of water when you add store bought Brandy
 - It is much simpler to calculate the sugar content and alcohol content
 - Once completed – you are done – except for clearing and adding some sulfite if needed.
- 

Questions?

- Contact Information
 - Email: steve@allinonewinepump.com
 - Website: allinonewinepump.com
- 

The Cheap Vodka Experiment

- Sample 1: untouched, bottom shelf vodka – a good nose check
 - Sample 2: the same vodka, but filtered with activated carbon
 - Sample 3: Vodka, but with French dark oak chips (10 days)
 - Good example of #3 if used with everclear for fortifying your port
 - Feel free to sample the difference between 1-3
 - The process used to make sample 3 is a great way to add oak flavor to your wine without using chips.
- 