

You will need:

- Potassium metabisulfate
- Go-Ferm
- Yeast nutrient
- Yeast
- Tartaric acid
- Pectic enzyme
- Everclear

Optional:

- Malolactic bacteria
- Grape tannin
- Oak

PORT TYPES

Ruby – 2 months, easy drinking, not complex, no oak

Vintage – 18 months then aged in bottle,
robust and fruity, no oak

Tawny - +18 months, oxygen exposure brings out
nutty 'port' character, touch of oak

FORTIFICATION FORMULA

$$X = \frac{V(C - A)}{B - C}$$

X = gal brandy needed
V = gallons of wine
C = final alcohol % wanted
B = alcohol % of brandy
A = alcohol % of wine

1. Harvest

2. Crush/de-stem

- Remove all stems
- Crush each berry

3. Test must

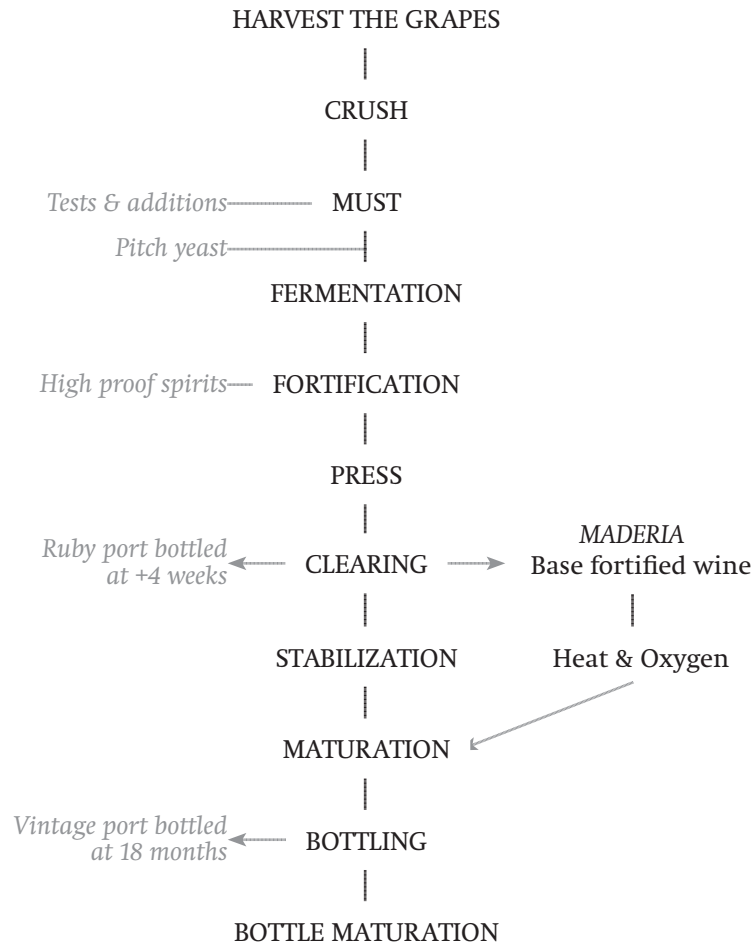
- Sugar - brix (°B) ~22 – 25 °B
 - <22 to low (see adds.)
 - >26 MAY dilute
- Total Acid (TA) ~0.65 – 1.0 g/L
- pH 3.2 – 3.6

4. Additions

- Potassium metabisulfate (sulfite)
 - Add ½ tsp sulfite per 5 gallons
 - Dissolve in small quantity of must, add
- Nutrients
 - 1/8 tsp nutrient per gallon of must
 - Dissolve in small quantity of must, add
- Total Acid (TA) ~0.75g/L
 - 1 tsp Tartaric acid = 0.12g/L increase TA
 - Dissolve in small quantity of must, add
- Yeast
 - Choose strain – wet or dry
 - Dry: rehydrate with Go-Ferm 1.25g:1g dry yeast
- Pectic enzyme
 - ½ tsp per gallon of must
- Optional – Chapitalize (adding sugar)
 - Must < 22 °B
 - 1.5oz (~3T) sugar/ gal must = ~1°B
 - Dissolve in small quantity of must, add

NORTHERN BREWER'S

PORT WINE FLOW CHART



5. Primary fermentation

(Days 1 – 4 @ 59-85°F)

- Punch down cap & stir up lees - 3x daily

6. Fortification (stops fermentation)

- Add white brandy (Everclear) to 18-21.5% alcohol
 - Stop between 3 – 11.5 °B (actual) for dry to sweet port
 - Use taste test to make sure
 - Allow to macerate on the skins for 3 – 12 days
- Example:
- Want: A sweet port with a final gravity of 9.5°B and abv of 21%.
 - Have: 5 gallons of port with OG of 25°B and will be fortified when the brix READS 17°B (~11°B actual) which translates to ~8%. We will then need ~0.75gal of 95% Everclear to achieve this. This added volume will dilute the final sugar content to ~9.5°B.

7. Press thoroughly (Days 7 – 14)

- Let settle 1 day
- Transfer to bucket allow contact with O2

8. Clearing (3 – 4 weeks @ 55-65°F)

- Fining - Super Kleer or Sparkolloid
- Ruby port can be bottled after 4 weeks
- Make Madeira? Add heat!
 - Good: age 3 months @ 122°F
 - Best: age 6 months @ 104°F
 - Reduce the heat over a month
 - Oxidize - rack once per month from a height to allow full O2 exposure

9. Stabilizing

(6 – 18 months @ 55-65°F)

- Store in a bucket with airlock
- Optional – ½ oz med plus oak per gallon
- vintage port bottled at 18 months

10. Maturation (18+ months)

- Transfer to glass carboy
- Tawny port bottle here on out

11. Final racking/ Pre-bottling

- ~1 month before bottling
- add ¼ tsp sulfite per 5 gallons
- pH/TA
 - Too acidic – difficult, call NB
 - Too flat – add tartaric acid to taste
- pH ~ 3.5
- Fining - Super Kleer or Sparkolloid
- Optional - Filter

12. Bottle

- Add 1/8th tsp sulfite = 25ppm
- 18 months – 6 years
- Wait 2 months before opening to avoid bottle shock