

# How To Make Sparkling Wine (on purpose!)



Tim Murphy  
Susquehanna Winemakers Guild  
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# Traditional Method

- Start with a dry base wine (cuvée)
- Re-ferment in sealed champagne bottles
- Settle out the sediment (riddle)
- Disgorge the sediment
- Top up & re-seal



# Dry Fermented Base Wine (Cuvee)

## Guidance

- Finished, stable, clear wine or blend
- Little or no sulfite (< 25 ppm)
- No K-sorbate
- $10\% < \text{ABV} < 12\%$
- $0.8 < \text{TA} < 1.0$
- $2.9 < \text{pH} < 3.2$

## Mine

Vidal Blanc  
1/8 tsp / 3 gal  
None  
11.7%  
0.86 TA  
3.26 pH

- Re-ferment in sealed champagne bottles

## Guidance

- 1.2 to 1.8 oz (~1/4 cup) sugar per gallon
  - $0.996 < SG < 0.999$
- 1/8 to 1/4 tsp yeast nutrient per gallon
- 1/32 tsp bentonite per gallon
- 1/4 tsp EC-1118 yeast per gallon
- Yeast starter added to cuvee

## Mine

- 1.2 oz/gal
- 0.999 SG
- 1/4 tsp/gal
- 1/32 tsp/gal
- 1/4 tsp/gal
- 3 gal carboy

# Bottle after fermentation gets going

- Use American champagne bottles only
  - 26 mm neck
- Match closure size to bottle neck
  - 2 Closure options
- Reserve a bottle with airlock
  - 375 ml for “dosage”
  - 375 ml for topping up



# Closure option 1

- Plastic champagne stoppers (reusable)
  - \$13.95/100
- Wire cages (~ reusable)
  - \$8.95/100



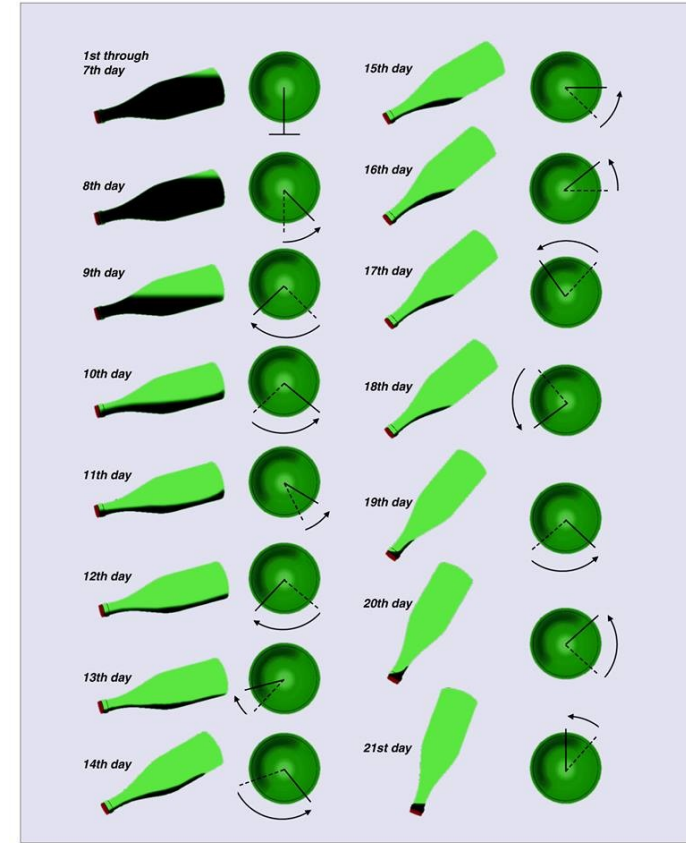
# Closure option 2

- Crown caps (one time use)
  - \$3.95/144
- Bidules
  - \$9.99/100 (Presque Isle)
- Crown capper
  - \$16.99 or \$44.99 (Presque Isle)



- Settle out the sediment

- Ferment upright or on sides for 6 months
- Riddle bottles
  - Shake to loosen sediment, tip bottles gradually to bottoms up
  - Twist 1/8 to 1/4 turn & bump bottle daily or at least weekly
  - Gradually increase the inversion of the bottles to vertical
- Sediment ends up in the bidule or plastic stopper
  - Keep bottles inverted





# My Riddling Method

- Use 6 gallon buckets
  - Start with 3 per bucket, riddle weekly
  - Progress to 7 per bucket over several weeks



# Disgorge the Sediment

- Freeze the neck of the bottle
  - 1-1/2 to 2 hours inverted or angled downward in freezer
- Have cold dosage wine ready
  - 1 cup sugar & 1/2 gram (1/16 tsp) sulfite mixed with 375 ml wine = 500 ml
- Hold bottle at 45 degree angle & open
  - Sediment will be ejected with the stopper or the bidule
  - Do this outside!



# • Top Up & Re-seal

- Add 30 ml (2 Tbsp) dosage wine for 2% sugar “extra dry”
  - Provides ~30 ppm sulfite
- Top up with cold dry reserved wine
- Crown cap OR Plastic stopper & wire closure to seal
- A few weeks to recover from bottle shock
- Drink cold within 1 or 2 years



# A Word on Safety

- No bottle bombs!
  - Use champagne bottles only
  - Calculate carefully
  - Measure carefully
  - Be sure  $SG \leq 0.999$
  - Minimize potential hazard
    - Keep bottles in covered buckets
    - Sparkling wine is safer to handle when COLD
    - Consider wearing eye protection & gloves



# References

- <https://winemakermag.com/article/505-methode-home-penoise>
- Chapter 20 of Lum Eisenman's "The Home Winemaker's Manual"  
[https://erowid.org/chemicals/alcohol/alcohol\\_article2\\_winemakers\\_manual.pdf](https://erowid.org/chemicals/alcohol/alcohol_article2_winemakers_manual.pdf)
- Bruce Zoecklein's "A Review of Methode Champenoise Production"  
[https://www.apps.fst.vt.edu/extension/enology/downloads/wm\\_issues/MethodeChampenoise.pdf](https://www.apps.fst.vt.edu/extension/enology/downloads/wm_issues/MethodeChampenoise.pdf)
- <https://winemakermag.com/article/480-making-sparkling-wine-from-kits-wine-kits>