SCOTT LABORATORIES

2220 Pine View Way • P.O. Box 4559 • Petaluma, CA • 94955-4559

Recommended Method to Restart Stuck Fermentations

When restarting a sluggish or stuck fermentation, yeast biomass build-up is as essential as good nutrition. Generally, the nutrient content of a stuck fermentation will be low and inadequate to support yeast growth. Adding an appropriate yeast rehydration nutrient (such as Go-Ferm or Go-Ferm Protect) that is rich in micronutrients and survival factors to the rehydration water increases their bioavailability to the selected yeast strain and results in an increase of biomass. Consequently, the selected restart yeast can acclimate more easily to the potentially hostile wine conditions (including high alcohol and low temperature). When residual sugar levels remain high, an addition of Fermaid K directly to the stuck wine is recommended. Spoilage organisms like *Lactobacillus* and *Pediococcus* can compete for nutrients and, in doing so, release metabolites that inhibit yeast growth. Adding lysozyme to the stuck wine prior to restarting the fermentation may also help control the unwanted bacteria and provide a cleaner environment for the new yeast culture to ferment in. Adding yeast hulls or Nutrient Vit End to the stuck wine prior to restarting the fermentation may help reduce accumulated toxins and improve chances for a successful restart.

For Wines Stuck at >3°Brix:

BUILD-UP

1. Add 2 lb/1000 gal (25 g/hL) of yeast hulls 24-48 hours prior to restarting the fermentation.
2. After 24-48 hours, rack off from the yeast hulls.
3. Add another 1 lb/1000 gal (12.5 g/hL) of yeast hulls.
4. Add a complete yeast nutrient (Fermaid K) directly to the tank of stuck wine at a rate of 0.5-1.0 lb/1000 gal (6-12 g/hL). If you are not planning on using Go-Ferm or Go-Ferm Protect (see Step 6) the dosage of Fermaid K should be increased to 1.0-1.5 lb/1000 gal (12-18 g/hL). Many winemakers also add lysozyme at this point to reduce potential bacteria problems.
5. In another clean container mix equal volumes of stuck wine and water. Generally this would total 10% of the total wine volume. (Example: For 1000 gal of stuck wine, use 50 gal water + 50 gal wine.) This container will be the “Mother Restart Tank”.
6. Calculate the amount of Go-Ferm or Go-Ferm Protect at 1.25 times the amount of yeast to be used. Dissolve this yeast rehydration nutrient in 20 times its weight of clean, chlorine free, 43°C(110°F) water. (Example: 5 lb yeast rehydration nutrient x 20 = 100 lb, divided by 8.33 lb/gal water = 12 gal water needed.) Mix the solution and cool to 40°C(104°F).
7. Select a yeast strain that is both alcohol tolerant and a vigorous fermenter such as Uvaferm 43, BC (Bayanus), K1 (V1116) or VIN 13. When the Go-Ferm/water solution temperature has cooled to 40°C(104°F), slowly (over 5 minutes) add yeast. Stir gently to mix and avoid clumping. Let this yeast suspension stand for 15-20 minutes.
8. Check the temperature of the yeast suspension. There should not be more than 10°C(18°F) difference between the yeast suspension and the diluted wine in the Mother Restart Tank. If there is too great a temperature difference, acclimatization may be required. Cold temperatures may shock the yeast cells.
9. When yeast suspension is properly rehydrated and proper consideration has been given to temperature differences, add the yeast to the Mother Restart Tank and wait 20-30 minutes.

INOCULATION OF STUCK WINE

10. Add 10% of stuck wine to the Mother Restart Tank and wait 20-30 minutes. (Example: For 1000 gal stuck wine, add 100 gal wine.)
11. Add 20% of stuck wine to the Mother Restart Tank and wait 20-30 minutes. (Example: For 1000 gal stuck wine, add 200 gal wine.)
12. Repeat Step11, three more times.
13. Add any remaining wine to the Mother Restart Tank.

For Wines Stuck at 1-2°Brix:

See protocol listed above, except in Step 4 reduce the complete yeast nutrient addition to 0.5 lb/1000 gal (6 g/hL).

For Wines Stuck at <1°Brix:

See protocol listed above, except in Step 4 eliminate the addition of a complete yeast nutrient (Fermaid K).