

Resuscitate your Stuck Fermentation

Sluggish and stuck fermentations have always been a problem in the wine industry regarding wine quality and economic impact. A problematic fermentation is usually recognized when it starts to slow or when it stops completely, but actions can be taken to prevent any issues.

In the case of sluggish or stuck fermentations, the success of a restart depends on the accurate diagnosis and fast intervention with the correct treatment.

DIAGNOSIS: Is it stuck or is it sluggish?

It is important to understand if a problematic fermentation is sluggish or stuck because the approach involves different treatments for each.

SLUGGISH FERMENTATION: The fermentation becomes abnormally slow. The yeast population struggles to convert sugar into alcohol and CO₂.



There's an opportunity to intervene and get the fermentation to complete!
Follow the [Sluggish Fermentation Protocol](#).

STUCK FERMENTATION: The fermentation completely stops, meaning sugar has not dropped in more than two days. The yeast population is no longer viable.



It will be necessary to acclimatize and add a new population of yeast to the wine.
Follow the Stuck Fermentation Treatment below.

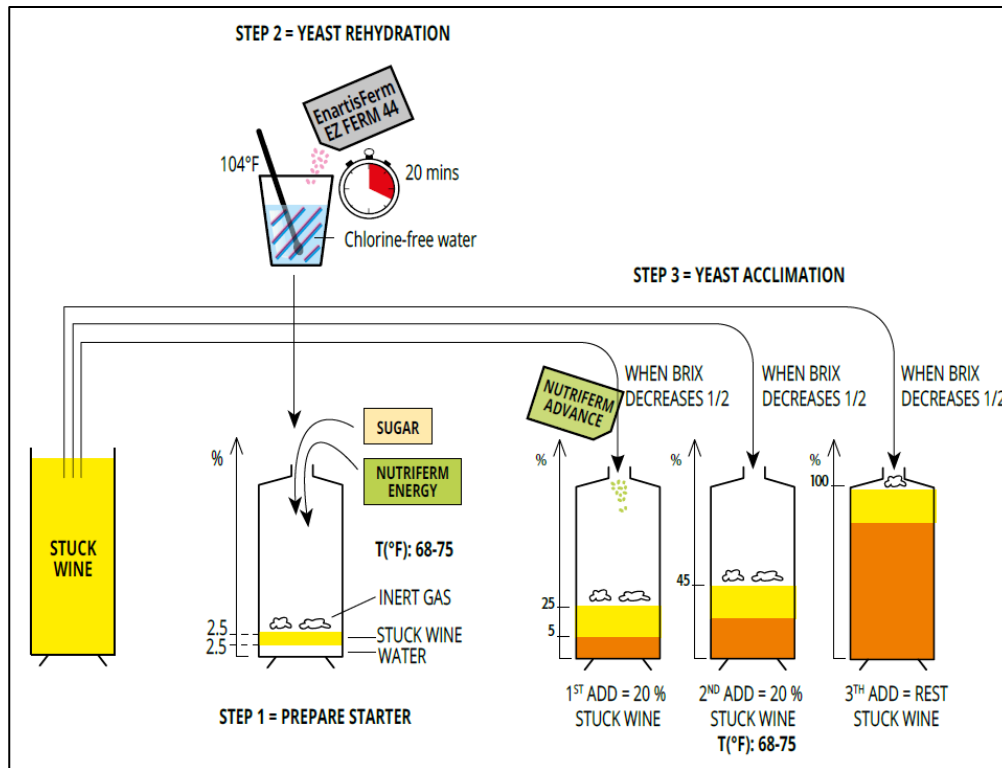
PREVENTION: Be proactive!

A stuck fermentation can be avoided if quick actions are taken as soon as the fermentation becomes sluggish. A fast intervention can resuscitate the yeast population, preventing the growth of acetic and lactic acid bacteria, which may affect the sensory quality of wine.

To do so, it is important to act at the first signs of sluggish fermentation:

- Take note of the fermentation rate ($\Delta^{\circ}\text{Brix}/\text{day}$) and volatile acidity.
- Adopt the [Sluggish Fermentation Protocol](#).
- If the fermentation rate continues to decrease, full yeast acclimatization will be necessary. See treatment below.

TREATMENT: Resuscitate your fermentation!



1. TREAT THE STUCK WINE BEFORE RESTART

24 HOURS PRIOR TO YEAST PREPARATION

- Press off skins or rack off lees.
- Remove spoilage microbes with **EnartisStab MICRO M** at 15 g/hL. Keep EnartisStab MICRO M in suspension for 30-60 minutes by mixing the must.
- Keep wine temperature between 15°C-20°C (59°F-68°F).
- Rack off lees 24 hours after treatment and add **NUTRIFERM NO STOP** at 20 g/hL.

2. PREPARE AND ACCLIMATE THE YEAST

- STEP 1: Prepare starter
Tip: Use a sanitized tank able to hold the entire volume of stuck wine.
– Take 2.5 % of stuck wine.
– Add the same amount of water (2.5% of total volume).
– Add 10 g/hL of **NUTRIFERM ENERGY** (calculated on the volume of stuck wine).
– Adjust sugar level to 50 g/L (5° Brix).
– Maintain temperature at 20-23°C (68-73°F).
- STEP 2: Yeast rehydration
Rehydrate 30 g/hL (calculated on the volume of stuck wine) of **EnartisFerm EZ FERM 44** in 10 times its weight of chlorine-free water at 40°C (104°F) and wait 20 minutes.
- STEP 3: Acclimate yeast and start fermentation
– Add rehydrated yeast to STEP 1 and monitor °Brix and temperature.
– At 1/2 °Brix depletion, add 20% of stuck wine + 5 g/hL of **NUTRIFERM ADVANCE** (calculated on volume of stuck wine).
– At 1/2 °Brix depletion, add another 20% of stuck wine.
– At 1/2 °Brix depletion, add the remaining stuck wine.

3. TRACK PROGRESS

Take note of sugar depletion every day ($\Delta^\circ\text{Brix}/\text{day}$) and volatile acidity level before and after treatment to be aware of the rate and health of fermentation.

TOOLS to help remediate stuck fermentations:

- **EnartisStab MICRO M**
Improve fermentation kinetics and ensure fermentation completion by removing spoilage microbes that inhibit yeast. EnartisStab MICRO M is an allergen-free, vegan alternative to lysozyme and SO_2 .
- **NUTRIFERM NO STOP**
Nutriferm No Stop acts as a protector by improving the integrity of the yeast membrane, revitalizing yeast, and improving the growth medium. In addition, it removes medium-chain fatty acids and pesticide residues that can inhibit fermentation.
- **NUTRIFERM ENERGY**
The nutrient content in a wine with a stuck fermentation is not enough to allow yeast to grow. Complex nutrients improve the activity of the yeast and facilitate its acclimatization under difficult conditions. Nutriferm Energy provides essential elements for yeast development.
- **EnartisFerm EZFERM 44**
It is a fructophilic yeast, with a short lag phase, great fermentative capacity and reduced nutritional needs. It has a high degree of implantation and resistance to alcohol and VA.
- **NUTRIFERM ADVANCE**
Prevent irregular fermentation kinetics while maintaining efficient sugar transport. NUTRIFERM ADVANCE improves yeast alcohol tolerance, prevents H_2S formation and detoxifies must.

For more information, please contact Enartis at (707) 838-6312.