



SpringCell™

THE SOLUTION TO STUCK FERMENTATIONS

Description:

Some of the operations made to activate fermentation act on the yeast growth and the fermentation kinetic at its beginning only without acting on the yeast survival or the end of fermentation. The use of **SpringCell™ yeast hulls** helps acting on the yeast viability on a long term thanks to their **must detoxification properties and the supply in survival factors** for the yeast generations formed during the yeast growth phase.

Yeast cell hulls are performing fermentation aids that allow to act efficiently against stuck & sluggish fermentation. **SpringCell™ yeast hulls are the original cell hulls patented by the university of Bordeaux (Lafon-Lafourcade and al, 1984).**

Properties:

- **Adsorption of the compounds that are toxic for yeast:** inhibitive fatty acids, phyto sanitary products' residues, ochratoxin A, thanks to the presence of glucans & mannans that fix these compounds.
- **Richness in survival factors, sterols, unsaturated fatty acids, considered as oxygen substitutes.** These elements allow the protection of successive generations of active yeast from the first generation while maintaining the integrity of their **membrane** while increasing their resistance to ethanol.
- **Cellular multiplication rate increase.** SpringCell™ is the only activator allowing to reach a total consumption of sugars in a must whose fermentation is slow, without producing volatile acidity.
- **Support role in musts.** SpringCell™ is almost 100% insoluble and has a **support effect in highly clarified musts** by increasing their turbidity without the inconvenience of organoleptic deviations that can be caused by lees.

Applications:

SpringCell™ is used in prevention when

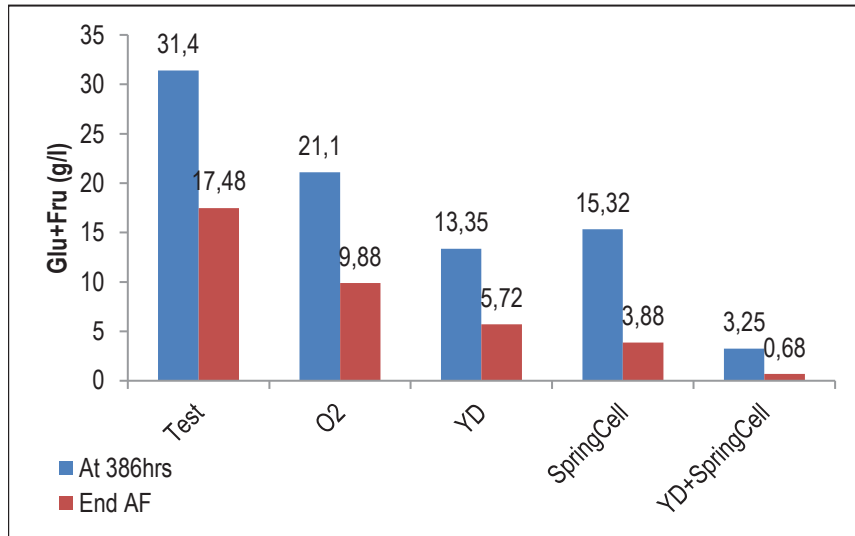
- **The concentration in reducing sugars is important**
- **The must is highly clarified** (i.e. absence of lees which contain unsaturated fatty acids that are necessary for the reconstitution of the yeast wall)

SpringCell™ is used as a **cure** when the fermentation is stuck to **detoxify the must** and for the **repitching of the yeast starter in good conditions.**

In this case the choice of yeast for the repitching of the stuck vessel is particularly important. We highly recommend the use of our strain **SafCEno™ BC S103**, the most vigorous of the Fermentis® range.



Trial:



Gros Manseng must 2010, 13.5% v/v,
initial YAN: 115ppm

The use of 30g/hl SpringCell™ cell hulls at third fermentation was more efficient than 10mg/l oxygen addition at maximum fermentation speed.

Combined with a yeast derivative (YD - organic nutrient source) that wasn't able to complete the fermentation by itself, it helped finishing it.

Dosage:

As prevention:

Dilute 20 to 30 g/hl in 10 times its volume of wine, add to the must between 35 and 45% of the sugars consumed and homogenize using a pumping-over. In red wine making, SpringCell™ addition should be done underneath the cap. In case of musts with a high settlement it is recommended to add SpringCell™ after the settling down, just before yeast inoculation.

As a cure, for stuck or sluggish fermentations:

Dilute 30 to 40 g/hl in 10 times its volume of wine then incorporate directly in the racked wine sulfited at a dose of 2 to 3 g/hl. Consult our restarting protocol.

Warning: Yeast hulls are subjected to usage limit of 40g/hl according to the European legislation and 3lbs/1000gal according to US (TTB) legislation.

Composition:

 in g%g of product (indicative values)

Dry matter:	> 94%	Lipids	18-22%
Total nitrogen:	12-18%	Mineral matters	3-5%
Total Polysaccharides:	55-59%		

Packaging:

Carton of 20 vacuum-packed sachets of 500g each (Full box net weight: 10 kg)

Carton of 1 vacuum-packed box of 10 Kg (Full box net weight: 10 kg)

25 kg sealed paper bags with polyethylene liner (only available in the US)

Guarantee:

SpringCell™'s richness in lipids makes it sensitive to oxidation. Fermentis® guarantees the products organoleptic properties by vacuum packing the product. Fermentis® guarantees an optimum storage of this product during 3 years in its original packaging at a temperature of maximum 20°C and in a dry place.

Fermentis® guarantees the product complies with the International Oenological Codex until its Best Before End Date in the storage conditions mentioned above. All our products are also fully authorized per TTB 27 CFR 24.246 prior to and during fermentation. Dosage limits may apply. Please contact your product specialist for more information.

Fermentis® fermentation aids and functional products are exclusively produced from natural yeast products. The Know-how of the Lesaffre group guarantees end users, high performing products as required by modern oenological applications.

The data contained in this technical sheet are the exact transcription of our knowledge of the product at the time of revision. They are the exclusive property of Fermentis®-Division of S.I.Lesaffre. It is of the user responsibility to make sure that the usage of this particular product complies with the legislation.



THE OBVIOUS CHOICE FOR BEVERAGE FERMENTATION