



## ProRestart 43

*ENCAPSULATED YEAST TO RESTART STUCK OR SLUGGISH FERMENTATION*

### WHAT IS IT?

ProRestart 43® is yeast cells are encapsulated within alginate (natural polysaccharide extracted from seaweed) and are also acclimatized to alcohol or other harsh conditions. Restarting a stuck or sluggish fermentation with active dried yeast also requires preparing a more time-intensive starter culture before being introduced into a stuck or sluggish fermentation.

### APPLICATION REQUIREMENTS:

ProRestart 43 can be effective when utilized within the following specific wine parameters

Potential Alcohol	<	15% (v/v)
Free SO <sub>2</sub>	<	20 mg/L
pH	>	3.0
Residual Sugar		may work as low as 10 g/L of sugar
Volatile Acidity	<	0.61 g/L (acetic acid)
Temperature		Optimal 20-20°C (68-72°F); Range 12-25°C (54-77°F)

All of these parameters act in balance with one another. It is critical to manage them together.

If harsh wine conditions exist, a more rigorous rehydration protocol may be required. If conditions fall outside of the recommended wine parameters, a traditional build-up method is necessary.

*A previous addition of yeast hulls (25 g/hL) into the stuck wine may improve the efficiency of ProRestart 43 due to the absorption of toxins.*

*In clean tanks, free of spoilage organisms such as lactic acid bacteria, ProRestart 43 can be reused up to one time.*

***Please note that there is a HIGH risk of cross-contamination when ProRestart 43 is transferred from one wine to another.***

**Recommended Dosage:**

75 g/hL      or      6.0 lb/1000 gal

*Note: Each 1 kilo bag will treat approximately 360 gallons.*

**To Use:****Step 1: Preparation of Stuck Wine and Addition of Beads to ProMesh Nylon Bags**

- Add 25-30 g/hL (2.0-2.5 lb/1000 gal) yeast hulls to the stuck wine 24 hours prior to bead addition. Rack off of the yeast hulls before introducing the beads if possible.
- Remove the encapsulated yeast beads from the recommended  $4\pm2^{\circ}\text{C}$  ( $39^{\circ}\text{F}$ ) storage temperature and allow it adjust to room temperature. This is to avoid thermal shock to the encapsulated yeasts.
- Recommended Dosage: 75 g/hL (6.0 lb/1000 gal).
- ☐ Place the beads into the ProMesh nylon bags before rehydrating. Distribute the beads evenly throughout the nylon bags to ensure good contact with the wine. Make sure to leave space for bead movement.

**Step 2: Bead Rehydration**

- Prior to rehydration, add the correct concentration of sugar (see chart below) into a volume of clean  $37^{\circ}\text{C}$  ( $98^{\circ}\text{F}$ ) water 5 times the weight of the beads (or enough sugar solution to completely cover the beads). Once the sugar dissolves, add the ProMesh nylon bags containing the beads.

***Note: The sugar solution does not get added to the must it is only necessary for helping the encapsulated yeast awaken.***

- ☐ Wait between 2 and 12 hours (see chart below for the recommended rehydration length) before adding the beads to the must.
- The temperature difference between the encapsulated yeast beads and the wine should be less than  $10^{\circ}\text{C}$  ( $18^{\circ}\text{F}$ ).



Potential Alcohol % (v/v)	Sugar Concentration	Hours of Soaking Required
13	20 g/L	2
13.5	40 g/L	4
14	60 g/L	6
14.5	80 g/L	8
15	100 g/L	10
15.5	120 g/L	12

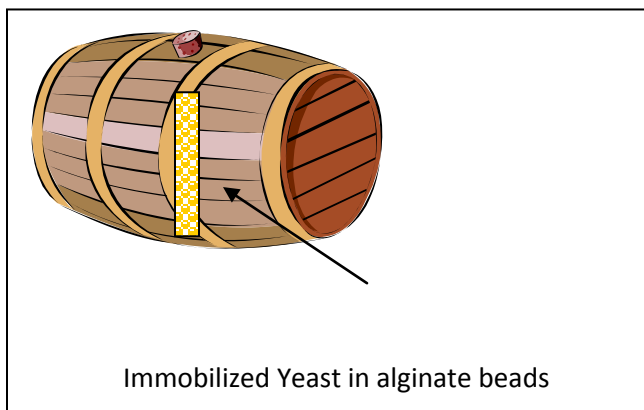
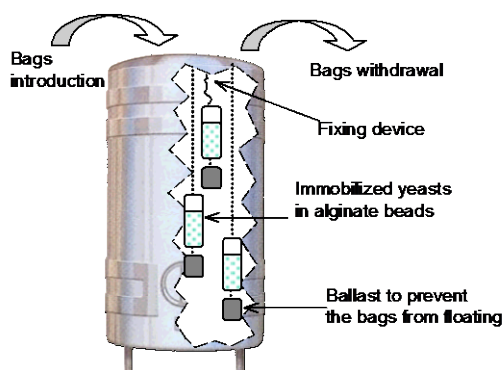
### STEP 3: Addition of Beads to Stuck Wine

- Introduce the ProMesh nylon bags containing the beads into the tank/barrel of stuck wine. The temperature difference between the beads and the wine should be less than 10°C (18°F).
- If several bags are added to the same tank, they must be placed at different heights for better distribution. A weight (ballast) is to be hung beneath the bags to prevent them from floating.
- Bags should be gently shaken several times a day to release accumulated CO<sub>2</sub>. The wine must be stirred daily without aeration.
- Leave the beads in the wine until the desired degree of fermentation is achieved.

### Regeneration Protocol

- The encapsulated yeast beads for ProRestart may need to be “regenerated” if they become clogged with tannins or tartrate crystals. In some reds, high levels of polyphenols may cause ProRestart to slow down. If this occurs, regenerate by rinsing for 1-2 hours in a 40 g/L sugar solution that is 10°C (18°F) higher than the wine temperature (but no more than 35°C/95°F). Then, reintroduce into the stuck wine.

### USAGE DIAGRAM:



**PACKAGE AND STORAGE:**

ProRestart 43 is available in 1 kg packages. **The product must be stored at  $4\pm 2^{\circ}\text{C}$  ( $\sim 39^{\circ}\text{F}$ ).** Once opened, it must be used as early as possible. Refrigeration is recommended to retain optimum activity. Unopened refrigerated ProRestart 43 retains activity for 12 months. The nylon mesh bags (tank and barrels) for product application are supplied with the ProRestart 43.

*The information is true and accurate to the best of our knowledge; however, this data sheet is not to be considered as a guarantee expressed or implied, or as a condition of sale of this product*

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