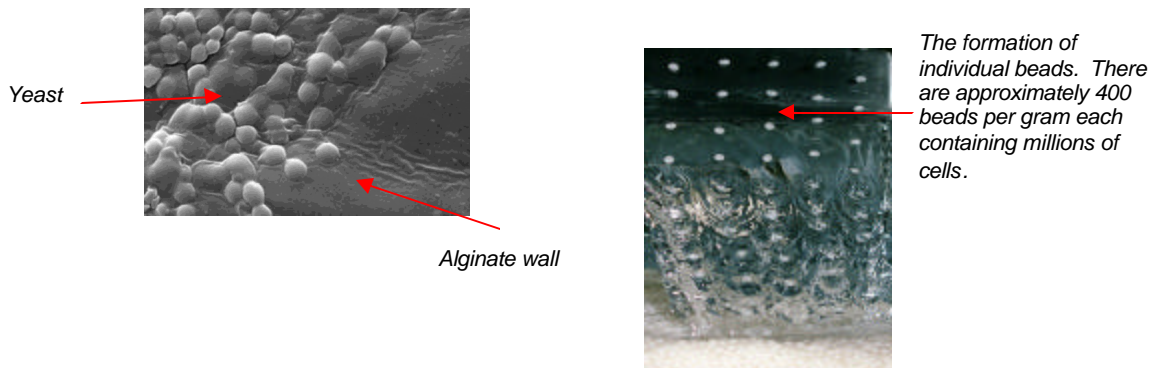


ProRestart[®] DV10-New Yeast Technology to Restart Stuck Fermentations

ProRestart DV10 is a unique encapsulated yeast preparation for restarting stuck fermentations easily and effectively. The yeast cells are acclimated to alcohol and other harsh conditions and then encapsulated within an alginate gel extracted from seaweed.



Patented ProRestart DV10 makes restarting stuck and sluggish fermentations easier than using active dried yeast with the traditional restart method. Unlike active dried yeast starters, the encapsulated yeast are adapted to high alcohol. The time intensive starter culture build-up steps, common in traditional restart procedures, can be eliminated completely. The use of ProRestart DV10 helps maintain freshness and preserve quality.

For ProRestart DV10 to be successful, the wine should fall within these parameters:

- Potential Alcohol – up to 15.5% v/v
- pH – > 3.0
- Free SO₂ – < 20 mg/L
- Residual sugar – will work well even below 10g/L of sugar
- Volatile acidity – < 0.61 g/L (acetic acid)
- Temperature – optimal 20-22° C (68-72°F); range 12-25° C (54-77°F)

All of these parameters act in synergy with one another. It is critical to manage them together. For example, if you have a red wine with high alcohol and high SO₂, increase the temperature to 20-25° C (68-77°F).

Note: 25°C (77°F) is a higher temperature than we recommend when using traditional restart protocols.

ProRestart is simple to use! There are only three steps.

STEP 1: Preparation of Stuck Wine and Addition of Beads to 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.
- Remove the encapsulated yeast beads from the recommended 4° C (~39°F) storage temperature and allow them to adjust to room temperature. This will avoid thermal shock to the encapsulated yeast.
- Recommended dosage: 75 g/hL (6.0 lb/1000 gal)



- Place the beads in the nylon bags before rehydrating. To ensure good contact with the wine, distribute the beads evenly throughout the nylon bags, leaving plenty of space for bead movement. For tank additions, each bag should not contain over 5 kg ProRestart DV10. Treating 200 hL (5282 gal) requires 3 bags with 5 kg of beads in each. For barrel additions, use 170 g of beads per barrel divided between two bags (each containing 85 g). One kg of beads will treat approximately 6 barrels.

STEP 2: Bead Rehydration

- Prior to rehydration, add the correct concentration of sugar (see chart below) into a volume of clean 37°C (98°F) water 5 times the weight of the beads (or enough sugar solution to completely cover the beads). Once the sugar dissolves, add the beads.
Note: The sugar solution does not get added to the must. It is only necessary to aid in encapsulated yeast activation.
- Wait between 2 and 12 hours (see chart below for the recommended rehydration length) before adding the beads to the must.

| Potential Acohol % (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 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 CO₂. The wine must be stirred daily without aeration.
- Leave the beads in the wine until the desired degree of fermentation is achieved.
- Beads may need to be “regenerated” if they become clogged with tannins or tartrate crystals. In some reds, high levels of polyphenols may cause ProRestart DV10 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.

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.