# **PROCEDURE**

## Rehydrating Yeast (S.cerevisiae)

## WITH GOFERM PRODUCT AND **INOCULATING MUST**









### **DOSAGE RATE**

25g/hL Active Dry Wine Yeast (ADY)

This procedure is not for the yeast strains Torulaspora delbreukii or Metschnikowia pulcherrima.

30g/hL GOFERM PRODUCT (Either GoFerm®, GoFerm Protect® or GoFerm Protect Evolution®). If using more or less yeast, respect a ratio of 1 part yeast: 1.25 parts GoFerm Product.

## REHYDRATION PROCEDURE (FOR A 1000L FERMENT)

- A. Add 300g GOFERM Product (30g/hL) into 5 litres of 40-43°C clean chlorine-free water (not distilled).
- B. Stir until an homogenous suspension, free of lumps is achieved. Due to the high sterol content of GoFerm Protect® and GoFerm Protect Evolution®, they do not easily dissolve. Once the powder is added to the water and stirred, leave for 10 minutes, within which time the powder will have dissolved.
- C. When the temperature of this Goferm Product / water suspension is between 35-40°C gently sprinkle 250g dry yeast (25g/hL), slowly and evenly, onto surface of the suspension, whilst gently stirring.
  - slow addition of yeast to the suspension surface is necessary to allow rehydration while yeast is in suspension.
  - The aim is to achieve uniform hydration (whilst avoiding clumping/mass deposits where moisture uptake is inconsistent) in the rehydration vessel.
- D. Allow the Yeast/GoFerm Product Suspension to stand for 20 minutes, before further gentle mixing. During this time allow the yeast suspension temperature to slowly approach the chosen fermentation temperature.

### **INOCULATION PROCEDURE**

Once the Yeast Rehydration Procedure from Steps A - D has been completed, it is time to inoculate the juice/must.

- E. i) Inoculation Protocol for Juice where the Baume is less than 14.9° (Brix < 26.8)
  - After the 20 minute rehydration time has lapsed (Step D), increase Yeast/Goferm Product Suspension volume by 10% with the juice to be inoculated and wait 10 minutes before addition to juice. Before this suspension is added to the juice, ensure temperature of the suspension is within 5-10°C of the juice to be inoculated. If not, incremental additions of grape juice is recommended. To minimise thermal shock, ensure temperature changes of less than 10°C.



ii) Inoculation Protocol for Juice where the Baume is greater than 15°(Brix >27). Use GoFerm Protect.

This is a three-step inoculation protocol to minimise the loss of cell numbers due to osmotic shock. It will also encourage the yeast cells to trigger the biochemical mechanisms to respond to high osmotic potential.

- Step 1: Increase Yeast/Goferm Protect® Suspension (From Step D) volume by 10% using juice. Mix gently and wait 10 minutes before the next step.
- Step 2: Increase the Yeast/Goferm Protect® / Juice Suspension volume by a further 20% using juice. Mix gently and wait 30 minutes before the next step.
- Step 3: Increase the Yeast/Goferm Protect® / Juice Suspension volume by a further 25%. Mix gently and wait 30 minutes before inoculation of the juice. Before this suspension is added to the juice, ensure temperature of the suspension is within 5-10°C of the juice to be inoculated. If not incremental additions of grape juice is recommended. To minimise thermal shock, ensure temperature changes of less than 10°C.

### **FURTHER NOTES**

- For juices where the baume is less than 14.9°C, the rehydration / inoculation procedure from Step C to Step E(i) should be completed with-in 30 minutes.
- It is recommended that white grape juices/musts be inoculated at no lower than 18°C
- Please refer to your Lallemand representative to assess the advantages of using Fermaid A®, a source of organic and inorganic nitrogen, added 1/3 way through fermentation.
- Fermaid A® is formulated to provide an inorganic (DAP) / organic (amino) nitrogen balance that improves yeast ability to manage fermentation related stresses.
- Please use an accurate thermometer and a stopwatch.

#### **STORAGE**

- All active dried yeast should be stored dry, between 4 and 12°C and the vacuum packaging should remain intact.
- GoFerm Products should be stored in a cool dry place, below 20 degrees. Avoid moisture and high temperature.

