Using **Pinnacle** Active Dry Wine Yeast

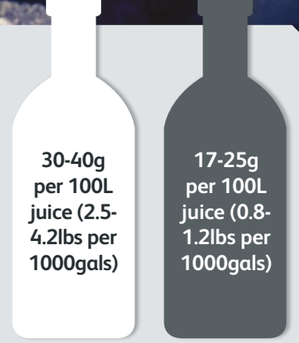
The proper preparation of Active Dry Wine Yeast (ADWY) is crucial for a successful fermentation.

A simple process, done properly, can save a lot of time and anxiety down the track.

Having an active starter culture minimises the lag phase (an important factor in achieving a healthy ferment) and decreases the chance of sluggish or stuck fermentations.

Inoculation Rates

Rehydrating 25g of ADWY in 100L (2lbs/1000gals) of juice/must will achieve a minimum $5x10^6$ viable cells/ml.



- To achieve an effective fermentation it's important to have a population of $1.2\text{-}1.5x10^8$ viable cells/ml present at the end of yeast growth (a third to half way through fermentation).
- Therefore, **a minimum starting population of $5x10^6$ viable cells/ml is required**.
- For reds, dosage can be lower due to the presence of nutrients (via skins), but for highly clarified whites and historically difficult juices, 30-40g/100L (2.5-4.2lbs/1000gals) is recommended.

Recommended procedure for

Rehydrating Pinnacle Active Dry Wine Yeast

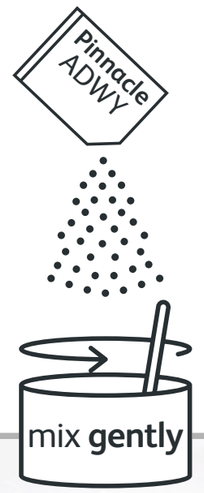
This process takes about **30** MINUTES

EACH STEP IS VITALLY IMPORTANT FOR OPTIMUM YEAST REHYDRATION

1

Rehydrate ADWY by slowly sprinkling it into 5-10 times its weight into clean water, pre-heated to between 35-40˚C/95-104˚F

- Any toxins or chemicals present in the water can harm/kill the yeast cells during rehydration.
- Rehydrating at a lower temperature will result in **essential cytoplasmic material leaking from the cells** (e.g. micronutrients), thus reducing cell viability.
- It's best when **first adding the yeast to water** to **mix very gently**, exposing all the yeast to the water.



2

Allow the yeast to stand for 15 MINUTES without stirring.

- Allows the cell membranes to regain maximum fluidity; without this step, if stirring too quickly it can physically damage the yeast cell membranes.'
- Stirring will also disperse micro-nutrients that had first escaped the cells upon contact with the water. These important micro-nutrients can be reabsorbed by the cells if within the immediate vicinity.

3

Adjust the temperature of the rehydrated yeast solution to within 5˚C/9˚F of the juice/must (sulphite-free) to be inoculated by adding sufficient volumes to give successive 5˚C/9˚F reductions in temperature.

Acclimatise the yeast to the juice/must.

This should be done **over a 15 minute period.**

4

Use the yeast within 30 MINUTES of rehydration.

- After 30 minutes, the activity of the yeast can **start to decline** due to lack of nutrients.
- This time can be extended if the yeast was acclimatised with juice or water containing nutrients.

5

It's recommended the juice/must to be inoculated is 18˚C/64˚F or higher to avoid extended lag time.

18˚C /64˚F or higher

- An important factor for the cell population to reach $1.2\text{-}1.5x10^8$ viable cells/ml is for the temperature to remain **above 18˚C/64˚F for the initial stage of fermentation**.
- **Within 10-20%** of the sugar being metabolised (1-3 days), the **temperature of the ferment can be reduced.**