

# DYNASTART®

Patent F 2.736.651

A combination of growth and survival factors, **DYNASTART®** is a yeast preparation for use in the rehydration water of active dry yeast (ADY).

## SPECIFICATIONS

A specific preparation of yeast origin, naturally rich in vitamins, minerals, fatty acids and sterols. **DYNASTART®** improves resistance to difficult medium conditions (*high alcohol percentage, low fermentation temperatures*) but also makes it possible to compensate for a deficiency in sterols (*low turbidity, anaerobic vinification*) for a strong fermentation finish..

**DYNASTART®** improves viability and the general metabolism of the yeast, and thus:

- Significantly increases **resistance to ethanol**.
- Avoids excessive production of volatile acidity.
- Improves **aroma release optimization / aroma production** by the yeast.
- Limits the production of negative sulfur compounds.
- Reinforces starter culture efficiency.

## OENOLOGICAL APPLICATIONS

To be used especially in the event of high potential alcohol degree, in the event of low juice turbidity, low fermentation temperature, and in fermentation restart starter cultures.

- **DYNASTART®** provides, **during yeast rehydration**, the essential elements (sterols) of the yeast membrane, and guarantees membrane fluidity, its resistance to alcohol and higher efficiency of the sugar transporters through **to the last yeast generation**.
- **DYNASTART®** does not provide assimilable nitrogen. In the event of nitrogen deficiency, an addition of ammonium salts or organic nitrogen remains essential.

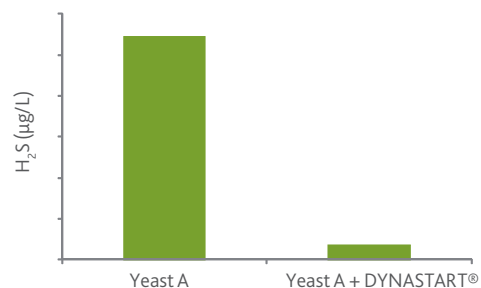
## SCIENTIFIC AND EXPERIMENTAL RESULTS

Growth factors contained in **DYNASTART®** (vitamins and minerals) are implicated in minimizing the formation of undesirable compounds, promoting cellular growth, and are co-factors in membranous transport mechanisms. Survival factors (sterols, fatty acids) play a role in fermentative metabolism and resistance to alcohol.

When the potential alcohol degree is very high (in red, for example), sterol intake prevents membrane disruption and increases cellular viability; therefore it allows a strong fermentation finish.

- **Prevention of the production of negative sulphur containing compounds**

Cabernet Sauvignon 2009. Total assimilable nitrogen 160 mg/L. Ethanol 14,5% vol. pH 3,55, VA (g/L) 0,58 (without DYNASTART/SUPERSTART®) and 0,41 (with DYNASTART/SUPERSTART®) at the end of the MLF.

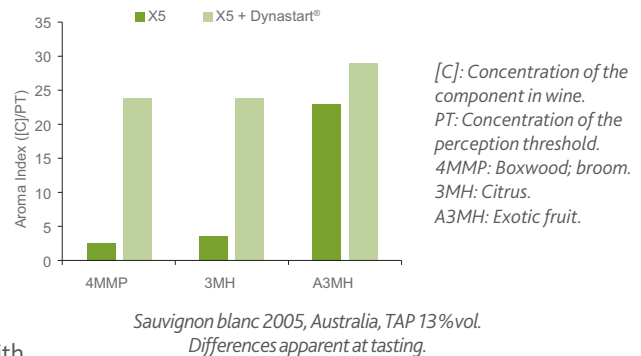


- **Prevention of excessive production of volatile acidity.**

The preparation of yeasts for stress (nutritional deficiency, high osmotic shock) before inoculation by using **DYNASTART®** limits volatile acidity production in difficult fermentation conditions by up to 50%. (*data available, contact us*).

- **Improved yeast aromatic performance**

By enhancing the general uptake of components of the must, **DYNASTART®** optimizes the yeast metabolism and enzymatic mechanisms, especially in terms of the production of fermentative aromas or the optimal release of certain aromatic precursors such as thiols.



- **Improved starter culture efficiency.**

Yeast re-hydration for the preparation of the starter culture with **DYNASTART®** enables better yeast acclimatization and better yeast multiplication. The implantation of the starter culture is improved and the fermentation finishes more rapidly.

- **Lag phase and prefermentative maceration (cold soaking).**

It is important to emphasize the fact that **DYNASTART®** enables a more rapid fermentation completion, but does not reduce the lag phase. In the case of cold prefermentative maceration (cold soaking), it is advisable to inoculate in two stages: one part before cold soaking, then the remainder at the end of the cold soaking, on both occasions using **DYNASTART®**.

## PROTOCOL FOR USE

### CENOLOGICAL CONDITIONS

To be added directly to active yeast rehydration water prior to the yeast for the first inoculation and for the restart culture in the event of stuck fermentation (*in this case, refer to our fermentation restart protocol*).

### DOSAGE

30 g/hL in must to be fermented.

### IMPLEMENTATION

Do not use open sachets.

Use a clean, inert container. Dissolve the total quantity of **DYNASTART®** needed for the fermentation tank in 20 times its weight in water at 37°. Mix well, then incorporate the active dry yeast. Follow the protocol for standard active dry yeast rehydration (*refer to the yeast sachet*).

### STORAGE

Store in original, unopened packaging and use within the specified use-by date.

Particular conditions: refer to the technical data sheet.

### PACKAGING

1kg bag.

5kg bag.

*For optimal management of yeast nutrition during alcoholic fermentation, refer to the Technical Booklet « Good management of fermentation activators ». A regular and complete alcoholic fermentation is an essential factor for a faster offset of malo-lactic fermentation.*

