

ACTIVE DRY YEAST

TECHNICAL DATA SHEET

A complex mixture of yeasts allowing the terroir and the grapes to express themselves to their full potential, in complete safety

Developed in collaboration with  **INTER RHÔNE**
INTERPROFESSION DES VINS A.O.C. CÔTES DE RHÔNE & VALLEES DU RHÔNE

↘ OENOLOGICAL APPLICATIONS

In collaboration with Inter Rhône, the observation and study of the behaviour of yeasts in pure cultures and complex combinations on grape musts have led to the development of **IOC DYNAMIX**, a mixture of diversified and complementary yeasts from various vineyards. Allowing several yeasts to be established throughout the fermentation process makes it possible for microbial biodiversity to be expressed, while at the same time avoiding standardisation of wine linked to uncontrolled fermentation defects. **IOC DYNAMIX** has been validated for vinification of red wines.

↘ OENOLOGICAL CHARACTERISTICS

- Combination of five *Saccharomyces cerevisiae* yeast strains (Y1, Y2, Y3, Y4, Y5).
- Killer factor: active K2 (for all yeasts).
- Resistance to alcohol: 16% vol.
- Nitrogen requirements: moderate. Nutritional complementation is recommended in certain cases depending on the initial level of assimilable nitrogen.
- Ensures regular fermentations between 22°C and 28°C. Avoid temperatures >26°C in case of potential alcohol level >14% vol.
- Lag phase: short.
- Fermentation speed: moderate.
- Production of volatile acid: low.
- Production of SO₂ : very low.

↘ MICROBIOLOGY QUALITIES

- Revivable yeasts: > 10 billion cells/g.
- Microbiological purity: less than 10 wild yeasts per million cells.

↘ DOSAGE AND USE

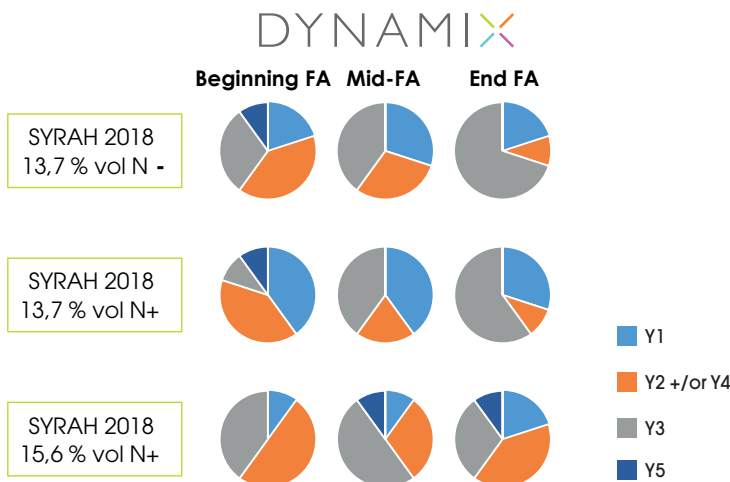
- Dosing rate: 20 to 30 g/hL of must.
- Rehydrate in 10 times its water volume at 37°C. It is highly advisable not to rehydrate the yeast directly into the must and highly recommended to rehydrate it in a clean container.
- Gently agitate to mix and allow to stand for 20 minutes.
- If needed, let the leaven to become acclimatized to the must temperature as well as to the difference of temperature between the must to be yeasted and the rehydration conditions.
- The rehydration process must not exceed 45 mn.
- If needed, the yeasts leavened can be at the must T° by introducing gradually the must. The T° difference between musts to be yeasted and the rehydration place must not exceed 10°C.

↘ PACKAGING AND STORAGE

- Polyethylene laminated bags of 500 g vacuum packed.
- Store in a cool and dry place. When open, the product must be quickly used.

CO-DOMINANCE OF SEVERAL SELECTED YEASTS

The various yeasts extracted from southern and northern vineyards really co-ferment the must, without any single yeast representing the sole significant population fermenting the grape. This co-dominance contributes to microbial diversity of the must and offers excellent adaptability to harvest diversity.



Establishment, at 3 stages of fermentation, of yeasts inoculated in mixture during experiments carried out on a single Syrah harvest (2018 vintage), by varying parameters of assimilable nitrogen [N-: moderate nitrogen deficiency - 110 mg/L of YAN; N+: no nitrogen deficiency - > 140 mg/L of YAN] and richness in sugars.

We can observe the variability of proportions of each yeast in the selected mixed flora, depending on richness in sugars and alcohol level, but also to a lesser extent depending on the level of available assimilable nitrogen. In all cases, however, the selected flora is dominant over flora of potential alteration, undetected in the musts.

EACH FERMENTATION IS DIFFERENT: EXPRESSING TERROIR AND VINTAGE

Although all yeasts in **IOC DYNAMIX** co-develop in the fermenting must, the population of some may become more or less significant depending on vinification conditions. The result is that the specific characteristics of the grape (linked to the year's climatic conditions, terroir, its maturity, grape variety...) "decide" on the proportions absorbed by yeast populations in comparison to each other.

QUALITY DIVERSITY

Yeasts making up **IOC DYNAMIX** were also chosen and above all tested for their œnological characteristics and their complementarity depending on harvest conditions. This blending of yeasts was validated for several vintages in various conditions of grape varieties, content in nitrogen and richness in sugars, with, as our core concerns:

- Completion of the entire alcoholic fermentation process
- Absence of immoderate production of volatile acidity
- Resultant clear wines, by avoiding negative problems of spontaneous fermentations, such as significant production of SO₂, reductive notes or other olfactory imperfections.