

## Actimax NATURA

Organic activator for alcoholic fermentation.  
Maximum varietal expression.  
Actively releases amino acids.

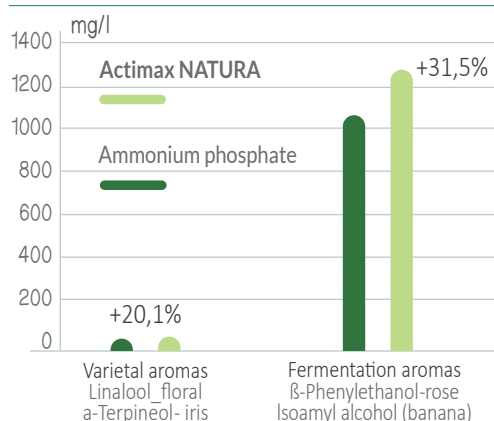
**ENHANCED AROMA TEST:** Study conducted on 2012-vintage Viura in La Rioja. Comparison between the aromatic profile of wine produced using organic nutrients rich in amino acids (Actimax NATURA) and that of another produced only with DAP input. 30% increase in the aromatic fraction.

Variation in some aromatic compounds.

	DAP	Actimax NATURA
 <b>LINALOL</b> (floral, menthol)	6	6,8
 <b>β-CITRONELOL</b> (citrus-fruit)	1,4	3,1
 <b>ACETATO DE LINALOL</b> (floral, lavender)	2	3,6
 <b>BUTIRATO DE ETILO</b> (pineapple)	0,39	0,43
 <b>ALCOHOL ISOAMÍLICO</b> (banana, marzipan)	132	146
 <b>DECANOATO DE ETILO</b> (floral)	0,50	0,55

Compound concentration in each sample in µg/l.

Aroma enhancement



### CHARACTERISTICS

**Actimax NATURA** is an organic nutrient used in alcoholic fermentation of grapes and musts. It is a very rich source of organic nitrogen (free amino acids)

Organic nitrogen is usually lacking in most alcoholic fermentation processes. By providing balanced amino-acid and vitamin input during initial fermentation, **Actimax NATURA** reduces the chance of unwanted outcomes in final fermentation. The availability of amino acids allows for the proper synthesis of the enzymes responsible for the revelation of varietal precursors (glycosidases, lyases). In addition, it limits the production of hydrogen sulphide and therefore avoids the generation of reduction defects. The correction of the YAN with prepared STE does not present a risk of temperature raises or sensory deviations.

It provides amino acids for generation of transport proteins and enzymes. It ensures the content of yeast assimilable nitrogen (YAN) avoiding the need for the use of ammonium salts.

This alcoholic fermentation nutrient is the result of the research carried out within the CENIT-DEMETER (2008-2011) Project on strategy and viticultural and oenological methods to combat climate change. Application of new technology that will improve the efficiency of the resulting processes, within the scope of the research carried out with the Rovira University, Virgili and the Spanish National Research Council (CSIC).



### SENSORY EFFECT OF ORGANIC NUTRITION

Enhancement of varietal aromas.

Amino acids accentuate the aromatic complexity increasing varietal records. A good nitrogen nutrition is in the optimal performance of the enzymes (proteins) responsible for the release of aromatic precursors present in the grape β-glicosadas and β-Lyase.

formation of fermentative aromas.

Amino acids are the basis of volatile compounds produced by the yeast. One-third of the higher alcohols are produced during the fermentation of amino acids. Subsequently and in the presence of ethanol are fruity esters of very positive influence in the wine.

Prevents reduction aromas.

## APPLICATIONS

Actimax NATURA is designed to be applied before alcoholic fermentation starts, before or during the application of the yeast strain. The application of this nutrient stimulates the populations of yeast in any wine being created, demonstrating their quality. It is particularly recommended in the following cases:

- Production of red wine from over-mature grapes and varieties with high alcoholic strength.
- Musts used to produce white and rosé wines at low temperatures.
- Highly clarified white varietal musts.
- In any production process to optimise the properties of the yeast strain employed.
- To enhance varietal expression in white, rosé and red wines.

## COMPOSITION

• Complete autolysis yeast (*Saccharomyces cerevisiae*). Specifically selected strain, grown on a nutrient-rich medium. Major source of primary amino acids. Slow assimilation. Thermally inactivated and completely autolyzed to maximize nitrogen resource availability. It is a natural product that is not genetically modified.

Per 30-g/hl dose of Actimax NATURA added to the must

Yeast-Assimilable Nitrogen (YAN)	44 mg/l
Organic nitrogen (amino acids, NOPA)	40 mg/l

## DOSAGE

20-30 g/hl

Under demanding conditions, users are recommended to add extra nitrogen.

### ∨ Fermentation under normal conditions

- Probable alcoholic strength: <12% vol.
- Fermentation temperature: >20 °C
- pH: >3.6
- YAN: >200 mg/l
- Early vintage
- Healthy vintage
- Short maceration
- Mild settling/use of fine residues
- Low-nutrient-requirement yeasts

### ∨ Fermentation under demanding conditions

- Probable alcoholic strength: >14% vol.
- Fermentation temperature: <18 °C
- pH: <3.3
- YAN: <200 mg/l
- Late vintage
- Botrytized vintage
- Long maceration
- Vigorous settling (NTU <80)
- High-nutrient-requirement yeasts

Users are recommended to measure the must's YAN and organic matter content (NOPA) beforehand.

## INSTRUCTIONS FOR USE

Dissolve the product in 10 times its weight of water or must and add to the vat during vatting, mixing thoroughly.

**Actimax NATURA** should ideally be employed before alcoholic fermentation starts.

## PHYSICAL APPEARANCE

Yellowy powder.

## PACKAGING

1-kg and 10 kg packets.

## PHYSICO-CHEMICAL AND MICROBIOLOGICAL PROPERTIES

Total Nitrogen [%]	< 12
Moisture [%]	< 7
Pb [mg/kg]	< 2
Hg [mg/kg]	< 1
As [mg/kg]	< 3
Cd [mg/kg]	< 1
Yeasts [CFU/g]	< 10 <sup>2</sup>
Moulds [UFC/g]	< 10 <sup>3</sup>
Lactic bacteria count [UFC/g]	< 10 <sup>3</sup>
Acetic bacteria [UFC/g]	< 10 <sup>3</sup>
<i>Salmonella</i> [UFC/g]	Absent
<i>E. coli</i> [UFC/g]	Absent
<i>Staphylococcus aureus</i> [UFC/g]	Absent
Total coliforms [UFC/g]	< 10 <sup>2</sup>

## STORAGE

Store in the original packaging in a cool, dry and odour-free place.

Use the product as soon as possible after opening.

Best before: 3 years from packaging.

## RGSEAA: 31.00391/CR

*This product complies with the International Oenological Codex and EC Regulation No 606/2009.*