

LAFAZYM® AROM

β -glucosidase and pectinase preparation for revealing varietal aromas.

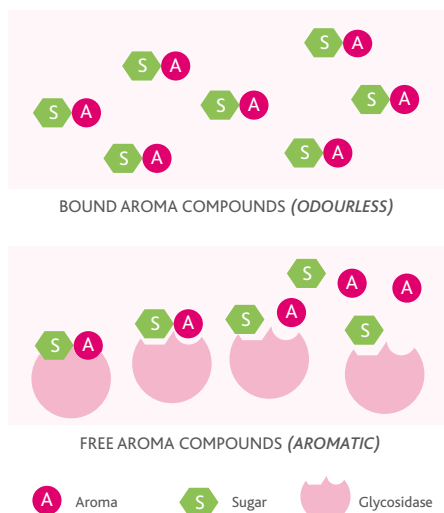
Qualified for the elaboration of products for direct human consumption in the field of the regulated use in Oenology. Natural non GMO and preservative free. In accordance with the regulation (EU) 2019/934 and the food chemical Codex and JECFA.

SPECIFICATIONS AND OENOLOGICAL APPLICATIONS

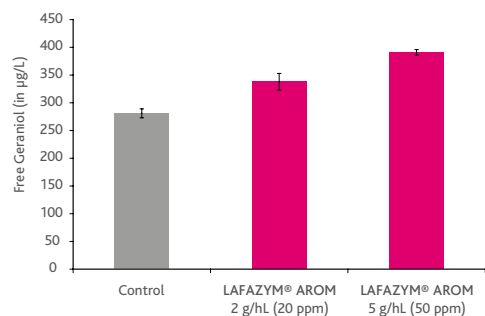
- LAFAZYM® AROM increases wines aroma intensity.
- LAFAZYM® AROM contains a high beta-glucosidases concentration which enables the release of a great number of aroma from their glycosylated precursors (terpenes, norisoprenoids,...).
- LAFAZYM® AROM is particularly recommended on numerous white varietals such as Muscats, Riesling, Gewürztraminer, Chenin Blanc, Pinot Gris, Viognier, some Chardonnays and Sauvignons but also a variety of red cultivars for the production of rosé wines from Syrah or Grenache...
- To increase the amount of aromatic precursors use an extraction enzyme at crushing, such as LAFAZYM® EXTRACT or LAFAZYM® PRESS, and then LAFAZYM® AROM at the end of alcoholic fermentation.
- LAFAZYM® AROM Improves wine clarification.

EXPERIMENTAL RESULTS

- Numerous aroma are initially present in grape in their glycosylated precursor form. The enzymatic hydrolysis mechanism of terpenic glucosides is as follows:



- LAFAZYM® AROM increases the amount of free terpenes in white wines. Example of a treated Gewürztraminer wine (5 g/hL (50 ppm) – 8.5 weeks contact) in comparison with a non-enzyme control (duplicate). Observation: an increase in Geraniol (rose) which has a perception threshold of 130 $\mu\text{g/L}$ in the wines.



PRINCIPAL MONOTERPENS (FREE TERPENES):

- Geraniol: rose
- Citronellol: citronella
- Linalol: rose
- Ho-trienol: lime
- Nerol: rose
- Alpha-terpineol: Lily of the valley

PHYSICAL AND ANALYTICAL CHARACTERISTICS

Aspect granulates
Colour beige
Insoluble matter none

Standardisation activity
• β -glucosidase (BDG/g) > 3000

CHEMICAL AND MICROBIOLOGICAL ANALYSIS

Toxins and mycotoxins none
Total viable germs (CFU/g)..... < 5 x 10⁴
Coliforms (CFU/g)..... < 30
E.coli (/25 g) none
Salmonella (/25 g) none

Lead (ppm)..... < 5
Arsenic (ppm)..... < 3
Mercury (ppm)..... < 0.5
Cadmium (ppm) < 0.5

PROTOCOL FOR USE

OENOLOGICAL CONDITIONS

- The β -glucosidase reaction speed is reduced in presence of sugar **LAFAZYM® AROM** is thus preferably used at the end of alcoholic fermentation or on finished wines. This enzymatic reaction can be stopped by a bentonite treatment (for example, **MICROCOL® ALPHA** at 5 – 10 g/hL / 50 - 100 ppm).
- Bentonite: Enzymes are irreversibly inactivated by bentonite. A potential bentonite treatment must always be carried out after enzymatic action is completed, or enzyme addition must take place once the bentonite has been removed.
- SO₂: Enzymes are not sensitive to normal doses of SO₂ (< 300 mg/L) but it is recommended not to put the enzymes and sulphurous solutions in direct contact.
- The preparations are generally active at temperatures from 5°C to 60°C (41 - 140°F) at a wine pH of 2.9 to 4.0

IMPLEMENTATION

Dissolve **LAFAZYM® AROM** in 10 times its weight in water or must before incorporation. Once diluted, the chilled preparation can be used within the following 6 to 8 hours.

Safe practice: refer to the product safety sheet.

STORAGE RECOMMENDATION

- Store above ground level in a dry area not liable to impart odours. Ensuring stock is kept at a moderate temperature, in its original, unopened packaging.
- Optimal date of use: 4 years.

DOSAGE

The dosage is to be adapted taking into account the grape variety hence its bound aromatic potential as well as the targeted wine aromatic profile.

- **2 to 4 g/hL (20 - 40 ppm).**

Contact time: 5 weeks on average.

The dosage can be determined by trials in bottles. The effect of the enzyme must be monitored by regular tastings.

A batch of wine treated with **LAFAZYM® AROM** can then be blended achieve the desired aromatic profile.

PACKAGING

100 g tin - 1 kg box (10 x 100 g) - 10 kg box (10 x 1 kg).

