

# LAFASE HE GRAND CRU

Purified, pectolytic enzyme preparation for the production of structured wines for cellaring that is rich in colouring matter and with supple tannins. Product in accordance with the International Oenological Codex, with the Food Chemical Codex V (FCC) and the Joint FAO/WHO Expert Committee on Food Additives (JEFCA). Natural product, GMO-free, no added preservatives

## SPECIFICATIONS

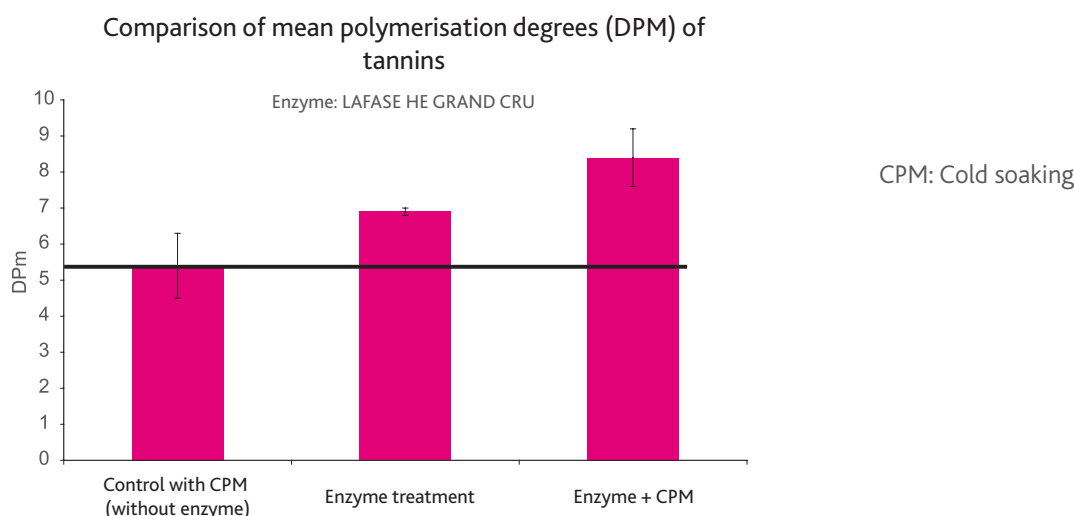
- Favours extraction of colouring matter and of highly polymerized tannins, which characterise stable, supple and rich wines.
- Allows for extensive, selective extraction of skin and pulp components in an aqueous medium (anthocyanins, tannins linked to polysaccharides, aroma precursors and aromas) during traditional macerations with or without cold pre-fermentation maceration or post-fermentation maceration.
- Limited formation of ethyl phenol precursors (notes of horse sweat, stable...) during potential contamination by *Brettanomyces* due to cinnamyl esterase purification.
- Improved colour conservation due to anthocyanase purification.

## OENOLOGICAL APPLICATIONS

- **LAFASE HE GRAND CRU** Produces high quality wines intended for prolonged ageing, for which volume and length on the palate are important.

## EXPERIMENTAL RESULTS

- **LAFASE HE GRAND CRU** allows for optimal extraction of phenolic compounds, particularly more highly polymerised tannins and anthocyanins, which have a higher capacity for conserving their stability over time.



Analysis	Control with CPM No enzyme	Lafase HE Grand Cru (without CPM) - Traditional maceration	Lafase HE Grand Cru with CPM
Colouring intensity (CI)	0.89	1.18 (+32%)	1.17 (+32%)
Total polyphenol index (DO280 nm)	43	50 (+16%)	50 (+16%)
Turbidity (in NTU)	44.6	14.2	11.9
Polymerised phenols (mg/L)	433	614 (42%)	622 (43%)
Total anthocyanins (mg/L)	477	527 (+10%)	559 (+17%)
Polymerised anthocyanins (mg/L)	37	46 (+24%)	49 (+32%)
Monomeric anthocyanins (mg/L)	440	481 (+9%)	510 (+16%)

## PROTOCOL FOR USE

### ŒNOLOGICAL CONDITIONS

- **LAFASE HE GRAND CRU** can be used from the crusher, including during cold pre-fermentation maceration.
- Bentonite: The enzymes are irreversibly inactivated by bentonite. Any bentonite treatment must always be carried out after the completion of enzyme activity or after the bentonite is eliminated.
- SO<sub>2</sub>: **LAFASE HE GRAND CRU** is not sensitive to normal SO<sub>2</sub> doses (<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 at a wine pH of 2.9 to >4.0.

### DOSAGE

Alter the dosage in relation to the skin quality (thickness), to phenolic maturity and the state of sanitation of the harvest

- **Red** : 3 to 5 g/100 kg of harvest.

Under-ripe or thick skins: 4 to 5 g/100 kg of harvest

Optimal maturity or thin skins: 3 to 4 g/100 kg

Infected harvest: 5 g/100 kg (to be incorporated after fermentation has started) : refer to technical file on altered harvest vinification.

To simplify dosage, a measuring scoop is available free of charge on request from your stockist. One level scoop corresponds to 10 g of microgranular preparation.

### IMPLEMENTATION

- 1- Dissolve **LAFASE HE GRAND CRU** in 10 times its weight in water, must or wine. The product dissolves immediately at room temperature;
- 2- Incorporate at maceration (as early as possible) using an **OENODOSEUR**, a dosing pump or a drip for improved homogenisation. Otherwise, carry out light homogenisation.

Safe practice: refer to the product safety sheet.

### STORAGE

In original, sealed packaging. Use within the specified use by date.

**LAFASE HE GRAND CRU** is a microgranular preparation ensuring the stability of different activities over time. Once diluted, the chilled preparation can be used in the following 6 to 8 hours.

Specific conditions: refer to the technical data sheet.

### PACKAGING

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

500 g box - 5 kg box (10 x 500 g).

