

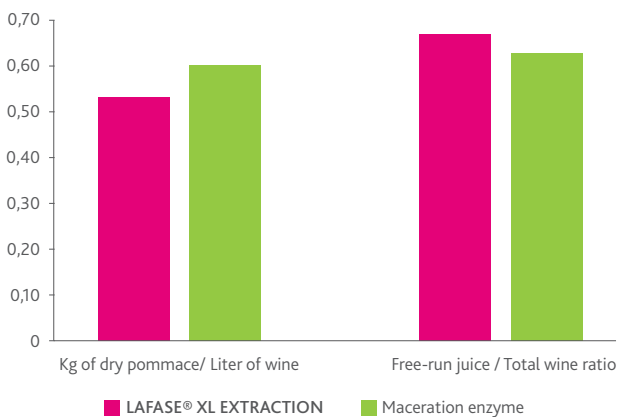
# LAFASE® XL *Extraction*

Liquid maceration enzyme.

Qualified for the elaboration of products for direct human consumption in the field of the regulated use in Oenology.  
In accordance with the regulation (EC) n° 606/2009 and the Food Chemical Codex and JECFA.

## SPECIFICATIONS AND OENOLOGICAL APPLICATIONS

- **LAFASE® XL EXTRACTION** is a liquid pectinolytic enzyme preparation rich in side-activities needed in maceration for the degradation of grape skins.
- White and red grape cell walls consists mainly of pectin, hemicellulose and cellulose. The structure of the grape skin cell wall is denser than the cell wall of the grape pulp. An enzyme rich in side activities, such as cellulase, hemicellulase, rhamnolacturonase,... is needed for the efficient extraction of red or white juice, as well as that of aromatic precursors, and in the case of red wines, phenolic compounds.



*Merlot 2015 - LAFFORT® Wine Experimental Cellar*

**LAFASE® XL EXTRACTION** allowed an increase in free run juice yield (+7%) with resulting drier pomace. Sensory and chemical analysis showed comparable color and phenolic extraction with both **LAFASE® XL EXTRACTION** and the control. The wines from the juice treated with **LAFASE® XL EXTRACTION** benefited from an overall organoleptic preference and were always judged to be faultless.

### LAFASE® XL EXTRACTION:

- Increases the yield of free-run juice.
- Favours the release of anthocyanins and tannins in red wines.
- Limits mechanical actions and allows for drier pomace.
- Eases juice and wine clarification.
- Increases overall wine volume.

### PHYSICAL CHARACTERISTICS

Aspect ..... liquid  
 Colour ..... brown  
 Insoluble matter ..... none  
 Stabilisers ..... Glycerol, Potassium chloride

Standardisation value\* (PGNU/mL) ..... ≥ 4 600  
 Approximate density (g/mL)..... 1.16  
 Preservatives ..... none

\*+/- 15% of the declared units of enzyme activity



**LAFFORT**

*l'œnologie par nature*

## BIOLOGICAL & CHEMICAL ANALYSIS

Heavy metals .....	< 30 ppm
Lead .....	< 5 ppm
Arsenic .....	< 3 ppm
Mercury .....	< 0.5 ppm
Cadmium .....	< 0.5 ppm

Toxins and mycotoxins .....	not detected
Total viable germs .....	< 5x10 <sup>4</sup> CFU/g
Coliforms .....	< 30 CFU/g
<i>E.coli</i> /25 g .....	not detected
<i>Salmonella</i> /25 g .....	not detected

## PROTOCOL FOR USE

### OENOLOGICAL CONDITIONS

- **LAFASE® XL EXTRACTION** can be added on grapes at the crusher.
- 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 after the bentonite has been removed.
- SO<sub>2</sub>: Enzymes are not sensitive to normal doses of SO<sub>2</sub> (<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 to 60°C (41-140°F) at a wine pH of 2.9 to 4.

### DOSAGE

The dosage must be adapted according to the grape variety, level of ripeness, wine style as well as the sanitary state of the grapes and maceration temperature.

#### • White grapes:

- 2 mL/100 kg when a clarification enzyme is used after pressing (**LAFASE® XL CLARIFICATION** or **LAFAZYM® 600 XL**) Add as early as possible in maceration
- 4 mL/100 kg in single enzyme application. Add as early as possible in maceration before draining

#### • Red grapes:

- 2 mL/100 kg for a pre-fermentation maceration temperature of 20 to 30°C (68 to 86°F).
- 4 mL/100 kg for a pre-fermentation maceration temperature of 8 to 20°C (46 to 68°F).
- Increase the dose by 1 mL/100 kg on whole cluster.

### IMPLEMENTATION

Dilute **LAFASE® XL EXTRACTION** in 10 times its volume in water or must before incorporation.

*Safe practice: refer to the product safety sheet.*

## STORAGE

- Store between 2-10°C (36-50°F) in a cool, dry and odourless place (refrigeration is recommended).
- Optimal date of use: 2 years after packing.

## PACKAGING

- 1,16 Kg (1 L) bottle.
- 11.6 kg (10 L) drum.

