# LAFASE® XL Extraction

Liquid maceration enzyme of grapes.

*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

- LAFASE<sup>®</sup> 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, rhamnogalacturonase... 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 pommace. 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 pommace.
- Eases juice and wine clarification.

# PHYSICAL CHARACTERISTICS

Aspect	liquid
Colour	brown
Insoluble matter	none
Stabilisers	glycerol, potassium chloride

Standardisation value (PGNU/g)≥ 390	00
Approximate density (g/L) 116	60
Preservativesno	ne



## CHEMICAL AND MICROBIOLOGICAL ANALYSIS

Toxins and mycotoxins	none
Total viable germs (CFU/g) < 5	x 10 <sup>4</sup>
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**

- LAFASE<sup>®</sup> 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.</li>
- 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<sup>ICE</sup>) 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<sup>®</sup> XL EXTRACTION in 10 times its volume in water or must before incorporation. *Safe practice: refer to the product safety sheet.* 

## STORAGE RECOMMENDATION

- Store off the ground in the unopened original packaging at a moderate temperature in a cool area (2-10°C / 35.6-50°F) not liable to impart odours.
- Optimal date of use: 2 years.

#### PACKAGING

1.16 kg (1 L) bottle. 11.6 kg (10 L) drum.

