# LAFAZYM® 600 XL<sup>ICE</sup>

Highly concentrated liquid purified pectolytic enzymes preparation high in side activities with enhanced efficiency for white and rosé juices, and wines on a wide range of pH and temperature.

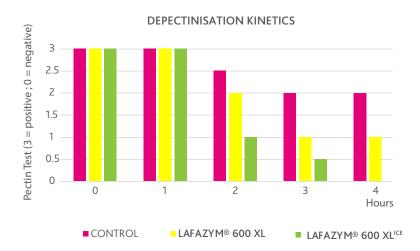
*Qualified for the elaboration of products for direct human consumption in the field of the regulated use in Oenology. Natural non GMO and preservative free. In accordance with the regulation (EU) 2019/934 and the food chemical Codex and JECFA.* 

# SPECIFICATIONS AND OENOLOGICAL APPLICATIONS

- LAFAZYM<sup>®</sup> 600 XL<sup>ICE</sup> is a very robust enzymatic preparation allowing fast depectinisation within a wide range of pH (2.9 4.0) and temperature (5°C à 55°C / 41°F 131°F).
- Allows the depectinisation of grape musts from difficult varieties (Chardonnay, Pinot Gris, Sauvignon, Ugni blancs, Muscats...).
- Significantly improves lees compaction.
- Purified from cinnamoyl esterase, LAFAZYM<sup>®</sup> 600 XL<sup>ICE</sup> limits the formation of vinylphenols (from free phenolic acids in grape juice) thus preventing a negative impact on wine aroma.
- Suitable for the fast depectinisation prior to flotation as well as before or after centrifugation.

### **EXPERIMENTAL RESULTS**

Depectinization comparison with LAFAZYM<sup>®</sup> 600 XL<sup>ICE</sup> on Chardonnay at 5°C (41°F). LAFAZYM<sup>®</sup> 600 XL<sup>ICE</sup> allows faster depectinization at low temperatures. In addition, better lees compaction was observed after 13h at 5°C (41°F) (data not shown).



# The pectin test result is noted after 5 minutes on a 0 to 3 scale.

- 3 Very high concentration of pectins. Appearance of a large flock that rises to the surface of the tube.
- 2 Significant presence of pectins. Appearance of haze and / or flocculation throughout the tube.
- 1 Low presence of pectins. Appearance of small flakes throughout the tube.
- 0 Absence of pectins. Maintaining the clear appearance of the mixture must + acidified alcohol.



#### PHYSICAL CHARACTERISTICS

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

Standardisation value:

Polygalacturonase (PGNU/mL ) 6 0	00
• Cinnamoyl Esterase (CINU/1000 PGNU) < 0	0.9
Approximate density (g/L) 12	00
Preservatives no	ne

#### CHEMICAL AND MICROBIOLOGICAL ANALYSIS

Toxins and mycotoxins	none
Total viable germs (CFU/g) < 5	x 10 <sup>4</sup>
Coliforms (CFU/g)	< 30
<i>E.coli (</i> /25 g)	none
Salmonella (/25 g)	none

Lead (ppm) <	5
Arsenic (ppm) < 2	3
Mercury (ppm) < 0.	5
Cadmium (ppm) < 0.	5

#### **PROTOCOL FOR USE**

#### **OENOLOGICAL CONDITIONS**

- LAFAZYM<sup>®</sup> 600 XL <sup>ICE</sup> can be added on grapes at the crusher, or in the settling/flotation tank.
- 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 to not put the enzymes and sulphurous solutions in direct contact.</li>
- 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

Dilute LAFAZYM® 600 XL<sup>ICE</sup> in 10 times its volume in water or must before incorporation. *Safe practice: refer to the material safety data sheet.* 

#### STORAGE RECOMMENDATION

# PACKAGING

250 mL/0.3 kg bottle.

10 L/12 kg drum.

- 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.



# DOSAGE

The dosage must be adapted taking into consideration the grape variety (juice that is easy or difficult to clarify), ripeness, targeted turbidity and sanitary state of the grapes.

- 0.5 to 2 mL/hL for must settling and clarification of freerun and press juices.
- 1 to 2 mL/hL for fast depectinisation prior to flotation.