LAFASE® FRUIT

Purified pectolytic enzyme preparation for the production of fruity, colourful and well-rounded red wines.

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

- Optimises aroma precursor extraction, colour extraction and favours gentle extraction of skin compounds (silky tannins).
- Limits the time requirement for cold pre-fermentation maceration (CPM).
- Favours extraction of phenolic compounds in the aqueous phase of fermentation.
- Improves free-run yields (5 to 15% on average), clarification, pressing and filterability.
- · Reduces production costs and simplifies tank management.
- Production of fresh and fruity red wines.

EXPERIMENTAL RESULTS

• Cold pre-fermentation maceration: The use of LAFASE® FRUIT allows for faster and more extensive extraction of phenolic compounds (5 to 20% on average) and in particular anthocyanins that have a higher level of polymerisation and are thus more stable. Anthocyanase purification also improves colour preservation.



Optimisation of extraction by LAFASE® FRUIT (4 g/100kg) compared with non-enzyme treated CPM control

• Wines produced with LAFASE[®] FRUIT were fruitier (fresh fruit notes) and rounder compared with wines produced with cold pre-fermentation maceration alone (Vinitech Tasting, 87 tasters).



PHYSICAL CHARACTERISTICS

Aspect	granulates
Colour	beige
Insoluble matter	none

BIOLOGICAL & CHEMICAL ANALYSIS

Lead	< 5 ppm
Arsenic	< 3 ppm
Mercury	< 1 ppm
Cadmium	< 0.5 ppm
Toxins and mycotoxins	not detected

PROTOCOL FOR USE

OENOLOGICAL CONDITIONS

- Results obtained with LAFASE[®] FRUIT are optimised by the implementation of an appropriate vinification procedure: aromatic grape varieties, short macerations, controlled fermentation temperatures (25-26°C), rapid racking off etc.
- 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.
- SO₂: LAFASE[®] FRUIT is not sensitive to normal SO₂ 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 (41-140°F) at a wine pH of 2.9 to >4.0.

Standard value:

٠	Pectinase	(PGNU/g)		6	7(0	С)
---	-----------	----------	--	---	----	---	---	---

Cinnamoyl Esterase (CINU/1000 PGNU) < 0,5

Total viable germs	< 5x10 ⁴ /g
Coliforms	< 30 /g
E.coli /25g	not detected
Salmonella /25 g	not detected

DOSAGE

Alter the dosage in relation to phenolic maturity and the state of sanitation of the grapes.

- Red: 3 to 5 g/100 kg of grapes.
- Under-ripe or thick skins: 4 to 5 g/100 kg of grapes.
- Optimal maturity or thin skins: 3 to 4 g/100 kg

Infected grapes: 5 g/100 kg (to be incorporated after fermentation has started): refer to technical file on grapes affected by *Botrytis cinerea*.

- Rosé:
- maceration: 3 to 4 g/100 kg of grapes.
- pressing: refer to LAFAZYM® PRESS product data sheet.

IMPLEMENTATION

1- Dissolve LAFASE[®] FRUIT in 10 times its weight in water or must before incorporation. Once diluted, the chilled preparation can be used for the following 6 to 8 hours.

Safe practice: refer to the product safety sheet.

STORAGE

PACKAGING

250 g tin- 5 kg box (20 x 250 g)

- Store in original sealed packages, in a cool dry place, off the floor and in an odour-free environment.
- Optimal date of use: 4 years after packing.
- Open pack, well re-closed: 1 month after opening.

