

 **Enzymatic preparation enabling color extraction & stabilization**



Safizym Col Plus

ORIGIN

Enzymatic preparation produced by a selected *Aspergillus niger* strain.

PROPERTIES

Activity Conditions

- Pectinases* : Endo polygalacturonase (≥ 1050 PG/g), pectin methyl esterase (≥ 210 PE/g) & pectin lyase (≥ 30 PL/g)
- Active under oenological conditions (pH, SO₂, high polyphenol levels)
- **Active at low temperature (> 8°C) : cold maceration**
- **Active at high temperature (< 60°C) : hot maceration**
- Rich in secondary hemicellulase activity

Effects

- Hydrolyzes the pectin chains of the must
- Enables the **clarification et improves the pressability of the must**
- Weakens the cellular wall and facilitates the extraction of **phenolic (tanins & anthocyanins)** and polysaccharidic compounds without intensifying the mechanic actions thanks to its hemicellulase activity
- Contributes to the softening of tannic structure and the final balance of the wine
- Contributes to the stabilization of the color (free of anthocyanase type secondary activities that are harmful to color stability)

(*) : methodology available on demand

APPLICATIONS

This enzymatic preparation depectinizes the must and destabilizes the cellular walls of the skin, thus facilitating the migration of noble compounds (tannins, anthocyanins) to the liquid phase. The pressing is helped and the disappearance of pectins (fouling colloids) allows an easier and less stressing subsequent filtration on the finished product.

- **Short maceration: Safizym® Col Plus improves the varietal and aromatic expressions.** The extraction is reduced which favors soft tannins.
- **Long maceration: Safizym® Col Plus helps reinforcing the tannic structure of your wine without amplifying the astringency sensation.**

The obvious choice for beverage fermentation    

USAGE

Dilute the wanted dose in 10 times its own weight of water or must. This solution should not be stored more than a few hours. Incorporate the whole volume in the must that needs to be depectinized at the beginning of the tank filling. This supply will be homogenized during a pumping over or using micro oxygenation.

DOSAGE

The dosage of Safizym® Col Plus will depend on the cultivar, the maturity degree and the wine making process. Generally speaking, the dosages are the following:

Application at vatting:	1.0 to 3.0 g/hl
Application in vinomaceration:	1.0 to 2.0 g/hl
Application in cold maceration:	3.0 to 5.0 g/hl
Application on press wine:	2.0 to 4.0 g/hl

MICROBIOLOGICAL ANALYSIS

Salmonellas:	Absence in 25g of preparation
Coliforms:	< 30 / g of preparation
<i>Escherichia coli</i> :	Absence in 25g of preparation
Total germs:	< 5 x 10 ⁴ / g of preparation
Inhibitive antibiotic substances:	Negative

PACKAGING

- 100g security box
- Carton of 10 x 500g security boxes (net weight 5 Kg)
- Carton of 50 x 100g security boxes (net weight 5 Kg)

GUARANTEE

This pectolytic preparation is made from a non-genetically modified micro-organism.

Fermentis guarantees an optimum storage of this product during three years in its original packaging, stored at a temperature of maximum 20°C, away from humidity and odorous products. Fermentis guarantees the product complies with the International Oenological Codex until its Best Before End Date in the storage conditions mentioned above.

The quality of Fermentis enzymes is guaranteed by the know-how of the Company Soufflet Biotechnologies.