

Endozym® D PECT

Pectolitic enzyme for the quick clarification of musts. In order to make the clarification process of musts quicker, AEB Group turned towards the production of preparations based on pectinase with high Pectinlyase (PL) activity, able to attack the pectic chains from inside (endo-pectinase activity) and to degrade them quickly.

The utilization of **Endozym® D PECT** during the clarification of musts facilitates the extraction of the juice from the grapes, with an increase in the yield of free run juice. Thanks to the strong reduction in the viscosity of musts, the clarification is optimized with the obtainment of compact lees.

The combination of hydrolase, pectinlyase and polygalacturonase activities and the secondary activities make **Endozym® D PECT** particularly indicated for the treatment of musts difficult to be clarified, in particular damaged grapes.

Easy to be used because of its liquid form, **Endozym® D PECT** can be dosed automatically with **Dosamatic®** or with other volumetric dosing systems.

Endozym® D PECT

UP/g 20°C	6.500
FDU/g 20°C	5.500

Endozym® D PECT

Packaging

25 kg drums.
Prod. code 003898
1.100 kg IBC.
Prod. code 003899

Minimum dosage

2-4 mL/100 kg of must to be treated.

THE ENDOZYM ENZYMES AND SUBSTRATES UTILIZED DURING PRODUCTION ARE NOT DERIVED FROM GMO



USEFUL ENZYMATIC ACTIVITIES

- **PL Pectinlyase**: breaks down both the esterified and non-esterified pectins. This is a fundamental activity of **AEB Group** enzymes, since it produces a very rapid clarification speed.
- **PG Polygalacturonase**: breaks down only the non-esterified pectins. Its enzymatic activity works in synergy with the PL activity and performs a very important role in determining must clarity and wine filterability. The combination of PL and PG activities produces high quantities of free run juice in a very short period of time.
- **PE Pectinesterase**: it supports the PG in breaking down pectins.
- **CMC Cellulase**: represents several enzymatic activities which, in synergy with pectinase, release colouring matter, tannins and aromatic precursors from the grape skin.
- **BG Betaglucosidase**: is the association of 4 activities which concurrently release aromas from the sugar compounds to which they are normally bound in high percentages.

The global enzymatic activity, indicated for each preparation, can be expressed as:

- **UP/g**, is an enzymatic measure derived from the combined activity of the individually measured PL, PG and PE.
- **FDU**, is a practical measure based on the time needed for breaking down a standard of apple pectins at the temperature of 20 or 55°C.

All Endozym® enzymatic preparations are purified by the following activities:

- **PE Pectinesterase**: is responsible for the separation of the pectins' methyl group. In the enzymes of **AEB Group**, being based mainly on pectinolytic activity, the PE activity is extremely limited and does not increase the content of methyl alcohol.
- **CE Cinnamyl Esterase**: is an activity found in unpurified enzymes, which causes the formation of volatile phenols, compounds which lend unpleasant aromatic nuances to the wine, which, if present in high concentrations, are reminiscent of horse sweat.
- **Antocyanase**: is a secondary enzymatic activity which causes a partial breakdown of the anthocyanins with a consequent increase of orange hues in wines. The enzymes of **AEB Group** are obtained from *Aspergillus niger* strains, which do not produce anthocyanase.

DOSAGE

The recommended dosage varies according to the temperature of the must. By using higher dosages, the unfavourable influence of low temperatures can be rectified.

INFLUENCE OF SO₂

Used at normal dosages, SO₂ has no influence on the enzymatic activity.

DIRECTIONS FOR USE

Dissolve directly in 20-30 parts of non sulphurized must or demineralized water or add directly onto the grapes or must. Use at the start or during the refilling of the tanks.

SHELF-LIFE AND STORAGE

Endozym® D PECT is stable at room temperature for at least two years, with a loss lower than 5% per year starting from the third year. Liquid preparations should be stored at temperatures lower than 10°C for a period not longer than 24 months.

ACTIVITY CONTROL

There are various methods for evaluating enzymatic activity. The system utilized by AEB Group is the method of direct measurement, linked to the concentration of PL, PG and PE; the total of the three activities yields the UP per gram unity. The methods of determination of pectolitic units together with the relative activity diagrams are made available to all technical personnel by AEB Group.