







# ENDOZYM® ICS 10 Éclair

Liquid enzymatic preparation, specifically formulated for maximising the extraction of varietal aromas



#### -> TECHNICAL DESCRIPTION

**Endozym ICS 10 Éclair** is a liquid super-concentrated enzyme characterized by a noticeable pectinlyasic activity; it contains in fact 35,000 Pectinase units/g, conferring to this product a clarification activity by far higher than that of all other products. It has been specifically studied to demolish grape pectic chains and displays a high pectinlyasic activity, enabling to reduce very quickly must viscosity and to obtain a quick settling. Its utilization is suggested on white musts rich in pectic substances and with a high content in suspended solids.

**Endozym ICS 10 Éclair** is very effective in the presence of a high microbiological pollution and its utilization is excellent in musts obtained from pellicular maceration that are sometimes difficult to clarify for the quick development of the indigenous micro flora. With the utilization of this preparation, yields in free run juice are increased and more compact sediments are obtained. Also, filterability is significantly improved. In the case of musts from cold static clarification, the quantity of clear must, referred to the total of treated must, increases over 10%.

## -> COMPOSITION AND TECHNICAL CHARACTERISTICS

Enzymatic activity	Activity/g
PL (U/g)	35,000
PE (U/g)	1,550
PG (U/g)	8,500
CMC (U/g)	315
Total UP (U/g)	40,050

The value is approximate and is not a specification.

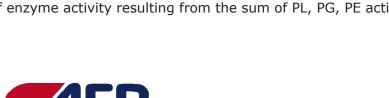
**PL** (Pectinlyase): breaks down both the esterified and non-esterified pectins. This is a fundamental activity of the AEB enzymes, since it produces a very rapid clarification speed.

**PE** (Pectinesterase): it supports the PG in breaking down pectin.

**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.

**CMC** (Cellulase): represents several enzymatic activities which in synergy with pectinase, release colouring matter, tannins and aromatic precursors from the grape skin.

The total measure of enzyme activity, which is indicated for each preparation, can be expressed as: **Total UP** (U/g), which is the measure of enzyme activity resulting from the sum of PL, PG, PE activities measured individually.











# ENDOZYM® ICS 10 Éclair

#### **Endozym ICS 10 Éclair** is purified by the following activities:

**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.

# → DOSAGE

Standard addition is 2 to 5 mls per ton of grapes or juice.

Higher doses must be used for grapes with low pH, problematic settling vintages or cultivars.

### -> INSTRUCTIONS FOR USE

Dilute directly in 20-30 parts of non-sulfurized must or in demineralized water and add to must or directly onto the grapes.

If grapes are too rich in phenolics the product may be added at the press discharge to avoid extraction of color and bitterness.

### -> ADDITIONAL INFORMATION

#### INFLUENCE OF SO,

Enzymes are resistant to  $SO_2$  levels normally used in winemaking, however it is good practice not to put them in direct contact with sulfur solutions.

#### **ACTIVITY CONTROL**

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

#### -> STORAGE AND PACKAGING

Keep **Endozym ICS 10 Éclair** in the original sealed packaging away from light, and in a cool, dry, odour-free place at a temperature below 20°C. Do not freeze. Observe the expiry date on the packaging. Use promptly after opening.

250 mL net flasks.

1 kg net flasks.

