

## SPECIFICATION SHEET

# LALVIN ELIOS ALTO 1-STEP™

### LACTIC ACID BACTERIA FOR OENOLOGICAL USE

Malolactic Kit including one sachet of lactic acid bacteria in powder form, obtained by lyophilization and one sachet of bacteria activator in powder form. Products packaged in laminated foil.

70528-66-65: 250 hL

70528-33-65: 25 hL

### PHYSICAL PROPERTIES

#### APPEARANCE & ODOUR

- White to beige colour
- Slight odour of fermentation

#### INGREDIENTS

- **Active freeze-dried bacteria:** *Oenococcus oeni* sp. and maltodextrin as carrier.
- **Activator:** Inactivated *Saccharomyces cerevisiae*

### FREEZE DRIED BACTERIA SPECIFICATIONS (In compliance with OIV codex)

Viable bacteria .....	> 10 <sup>11</sup> CFU/g
Dry matter .....	> 92 %
Coliform.....	< 10 <sup>2</sup> CFU/g
E. coli .....	Absent in 1 g
S. aureus.....	Absent in 1 g
Salmonella .....	Absent in 25 g
Acetic Bacteria .....	< 10 <sup>4</sup> CFU/g
Moulds .....	< 10 <sup>3</sup> CFU/g
Yeast.....	< 10 <sup>3</sup> CFU/g
Lead .....	< 2 mg/kg
Mercury .....	< 1 mg/kg
Arsenic .....	< 3 mg/kg
Cadmium.....	< 1 mg/kg

### ACTIVATOR PREPARATION SPECIFICATIONS

Dry matter.....	> 93%
Lactic Bacteria.....	< 10 <sup>3</sup> CFU/g
Coliform .....	< 10 <sup>2</sup> CFU/g
E.Coli .....	Absent in 1 g
S. aureus .....	Absent in 1 g
Salmonella .....	Absent in 25 g
Acetic Bacteria.....	< 10 <sup>3</sup> CFU/g
Moulds .....	< 10 <sup>3</sup> CFU/g
Yeast .....	< 10 <sup>2</sup> CFU/g
Lead.....	< 2 mg/kg
Mercury.....	< 1 mg/kg
Arsenic.....	< 3 mg/kg
Cadmium .....	< 1 mg/kg

### INSTRUCTIONS FOR USE

One sachet for right quantity of hL indicated on label.

Mix and dissolve content of the activator sachet in drinking water (temperature between 18 and 25°C). Then, add content of the lactic acid bacteria sachet and dissolve carefully by gently stirring. Wait for 20 minutes.

Add to this suspension the appropriate volume of wine (pH > 3.5, total SO<sub>2</sub> <45 ppm, no free SO<sub>2</sub>) at temperature between 18 and 25°C. Wait for 18 to 24 hours. If malic acid content is < 1,2 g/L, wait only for 6 to 10 hours.

Transfer the activated malolactic bacteria starter culture into the wine according to the volume indicated on the kit.

### STORAGE & SHELF LIFE

Store in a dry and cool place.

Shelf life: 18 months at 4°C or 36 months at -18°C in original sealed packaging. Use once opened.

#### LALLEMAND SAS

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