

# Pure Fermentation

## Cross Evolution

1 B 2.2.84 · IG  
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### Saccharomyces cerevisiae

A new hybrid yeast strain, Cross Evolution, was developed by the Institute for Wine Biotechnology at Stellenbosch University (South Africa) and Lallemand Oenology.

This specialty yeast is particularly well suited for promoting the typicity and balance of white wines (Pinot Gris, Sauvignon Blanc, and Gutedel) and rosé wines.

The specific qualities of Cross Evolution:

- ▶ High flavor release, particularly of grape variety-specific flavors
- ▶ Balanced fruity and vegetative flavors
- ▶ Low nutrient requirements
- ▶ Active killer factor (K2 factor), i.e. product prevails against spontaneous yeast flora
- ▶ Low formation of SO<sub>2</sub> bond partners
- ▶ Fermentation temperatures: 14 – 16 °C

#### Application

As a basic rule, musts should be inoculated with Cross Evolution as early as possible. Longer maceration times promote uncontrolled propagation of wild yeast and undesired bacteria. The following dosages will reliably prevent fermentation problems:

Intended application	Application quantity (g/hl)	
	normal	difficult conditions
White wine	25 – 30	30 – 40
Rosé wine	25 – 30	30 – 35

The quantities stated are reference values. They should be adapted to the individual requirements depending on the health of the grapes, the temperature, and the container size etc. Ensure that large containers are adequately chilled.

The optimum fermentation temperature is between 15 and 18 °C, the minimum starting temperature is 14 °C. The fermentation temperature should not exceed 25 °C.

At cooler fermentation temperatures (< 14 °C) we recommend adapting the yeast culture to the more challenging conditions in a smaller quantity (5 – 10 % of the total quantity) for 12 – 15 hours.

The best method is to stir Cross Evolution into ten times the amount of a must-water mixture at 35 °C. Addition of LALVIN GO-FERM<sup>®</sup> promotes the formation of active yeast cells and a high final degree of fermentation. After a rehydration period of 20 – 30 minutes, the activated yeast batch can be added to the must to be inoculated. Avoid excessive temperature jumps greater than 5 °C per hour.

#### Product Characteristics

Through extensive selection work, Stellenbosch University and Lallemand Oenology were successful in minimizing the nutrient requirements of the Cross Evolution yeast during fermentation. This characteristic is particularly suitable for musts with low nutrient content.

Cross Evolution offers speedy fermentation and a high final degree of fermentation. Wild yeasts are suppressed by the killer-active strain. Cross Evolution does not generate undesired fermentation by-products such as SO<sub>2</sub>, H<sub>2</sub>S, acetaldehyde, pyruvic acid (pyruvate), alpha-ketoglutaric acid, volatile acid, or ester.

Cross Evolution has high alcohol tolerance and can produce up to 15 % alcohol by volume.

#### Safety

No safety specifications are required for Cross Evolution since this product is used directly for food production. Storing, handling, and shipping this product do not create health or environmental hazards.

Additional information:  
Water pollution class (WPC) = 0.

## Storage

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Cross Evolution is packed airtight in laminated aluminum foil in an inert gas atmosphere. The integrity of the vacuum pack is easy to check.

Cross Evolution can be stored at 4 – 10 °C for a period of three years as long as the packaging remains intact. Short-term storage at 20 °C is acceptable. Once a package has been opened, it should be used up as soon as possible.

## Delivery Information

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The article no. for Cross Evolution is 93.353.005. It is available in the following packaging units:

500 g	laminated aluminum foil block pack
20 x 500 g	laminated aluminum foil block packs in cartons.

HS customs tariff no: 2102 10 90

## Certified Quality

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Cross Evolution is inspected regularly during the production process to ensure uniformly high product quality.

These inspections include technical function criteria as well as safeness in accordance with relevant laws governing production of foods. Strict controls are carried out immediately prior to and during final packaging.

Cross Evolution meets the purity criteria of the International Codex for Wine Processing Agents and complies with the German Wine Law.



Reg. No. 000480 QM

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