

IOC BoreAL™

ACTIVE DRY YEASTS

A breath of freshness for your grapes

↓ OENOLOGICAL APPLICATIONS

IOC BoreAL™ is a pre-fermentation yeast from the *Lachancea thermotolerans* family which turns sugar into L-lactic acid. This gives greater aromatic complexity to the wines produced using the treated grapes.

IOC BoreAL™ should be used at the pre-fermentation stage, at least 24 hours before inoculating with the yeast from the *Saccharomyces cerevisiae* family chosen for alcoholic fermentation.

↓ OENOLOGICAL CHARACTERISTICS

- Species: *Lachancea thermotolerans*.
- Alcohol resistance: <10% vol.
- SO₂ resistance: in red wine, added sulphur <40 mg/L. In white and rosé wines: free SO₂ <15 mg/L.
- Low alcoholic fermentation potential.
- Nitrogen requirements: high. Whatever type of wine is being made, ensure that the *Saccharomyces cerevisiae* strain receives classic nutrition, which must be carefully added together with 25g/hL of diammonium phosphate one-third of the way through alcoholic fermentation. If the initial YAN level is <110 mg/L, after inoculating **IOC BoreAL™**, add up to 30 g/hL of the organic nutritional agent of your choice.
- Optimal temperature for developing acidity: 18-25°C. Avoid overly low temperatures (<16°C) in order to ensure sufficiently rapid growth.
- Lag phase: short.
- Volatile acidity production: low.
- SO₂ production: very low.
- Acetaldehyde production: very low.
- Glycerol production: high.
- Foam production: very low.
- Lactic acid inhibits lactic bacteria: we recommend co-inoculating selected winemaking bacteria with the yeast (*S. cerevisiae*), where malolactic fermentation is desired.

↓ MICROBIOLOGY QUALITIES

- Revivable yeasts: > 10 billion cells/g.
- Microbiological purity : less than 10 wild yeast cells per million.

↓ RECOMMENDED QUANTITIES & INSTRUCTIONS FOR USE

1st inoculation: IOC BoreAL™

- Dosage: 25g/hL of must.
- Rehydrate in 10 parts water at a temperature between 20-30°C. Rehydrating the yeast directly in the must is not recommended. It's vital to rehydrate the yeast in a clean receptacle. Stir gently, then leave to settle for 20 minutes.
- If necessary, acclimatise the yeast to the temperature of the main body of must by adding it a little at a time. The difference in temperature between the must to inoculate and the rehydrated yeast solution must not be greater than 10°C. The total rehydration process should never take more than 45 minutes. Add to the must in airless conditions, then mix in well by performing a pump-over.
- Wait for 24 hours or longer before the second inoculation. Delayed inoculation leads to greater lactic-acid production and is most effective when the temperature of the must is low (<18°C).

2nde inoculation : *Saccharomyces cerevisiae*

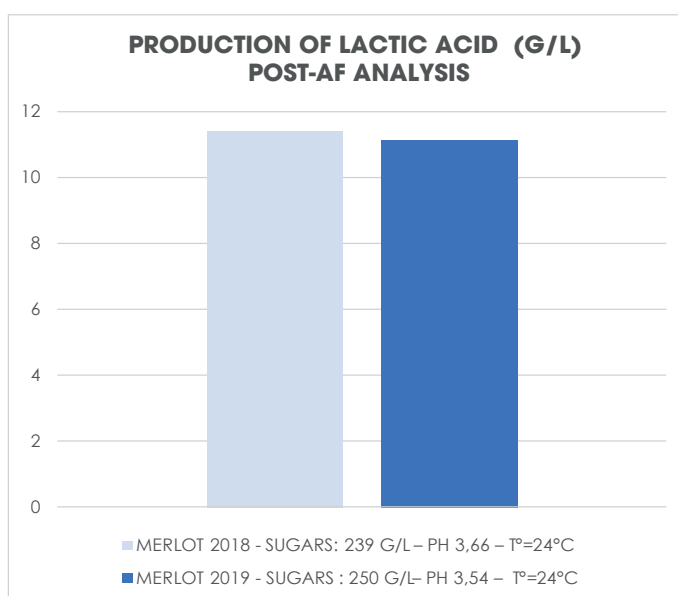
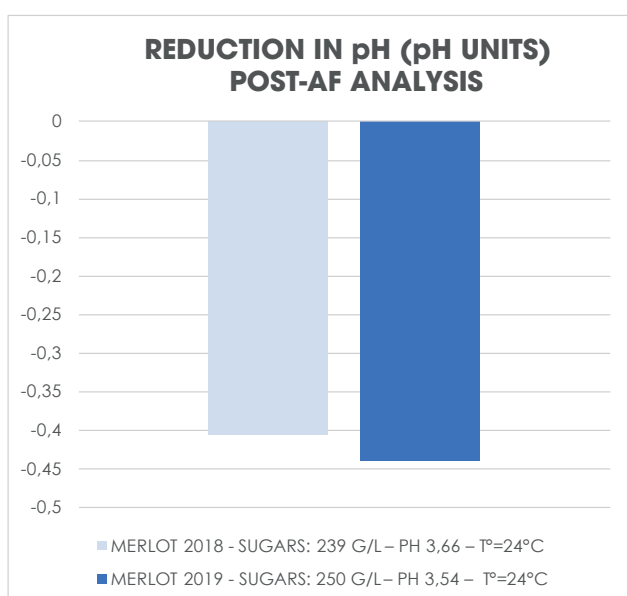
- Dose of use: 20 to 30g/hL
- Follow the conventionally recommended protocol.

↓ PACKAGING AND STORAGE

- 500g vacuum-packed laminated foil and polyethylene bags.
- Store at a temperature between 4 and 11 °C. Can survive being transported for up to 3 days if the temperature remains under 20°C. Once the pack has been opened, the content must be used quickly.

IOC BoreAL™

Great acidification potential in must



(Experiments performed in laboratory settings. 20g/hL of **IOC BoreAL™** at T0, then 25g/hL of IOC 18-2007 after 48 hours – yeast fed at T0 and 1/3 FA).

The lactic acid produced by **IOC BoreAL™** has the power to significantly rebalance the feeling of freshness in wines. Unlike other acids, it comes from a live source (instead of an artificial chemical compound), remains stable over time (doesn't precipitate as salts) and also lends the wine greater roundness.

Thanks to its unique metabolism, **IOC BoreAL™** also contributes to the aromatic complexity of wines and improves their microbiological stability through an indirect bioprotective effect (acidification).