DistilaMax AG™

Specific selected Mexican yeast strain for agave-based spirits

APPLICATIONS

- DistilaMax™ AG was selected in Mexico on Agave tequilana (blue agave) juice using Tequila production conditions.

- Using DistilaMax AG in fermentations allows distillers to achieve spirits with complex, intense and well-balanced aromatic profiles with fruity and citrusy notes, combined with sweetness and acidity in the taste, all typical traits of an exceptional Tequila.

- DistilaMax AG displays good temperature tolerance (20 °C-38 °C). The short lag phase limits the development of contaminating organisms.

- DistilaMax AG has the ability to ferment fructose well and to work on a wide pH range. This results in good fermentation kinetics with low residual sugars and high yield.

RESULTS WITH DISTILAMAX AG

- During the work of selection of DistilaMax AG, the kinetic of fermentation and the final fructose level were two criteria of success.

- **Figure 1** shows the ethanol content of DistilaMax AG along the fermentation in comparison with two strains used in the agave-juice based fermentation. At the end of fermentation, DistilaMax AG displays the highest ethanol content and the lowest fructose content.

- DistilaMax AG provides an excellent aromatic profile highlighting the quality of the raw material.

- **Figure 2** shows the results of the preference test done on the final spirits by a panel of experts.
Control 1 and Control 2 are two yeast strains used in Tequila production. The spirits produced with DistilaMax AG is the preferred one. On the nose, it is described as fruity with herb character, floral, complex, with notes of acidity enhancing the aromas. On the palate, the spirit is described as rich and well-balanced.
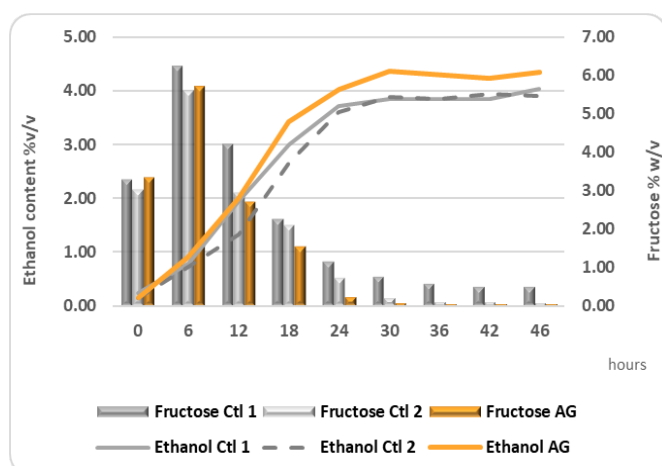
Figure 1: Kinetic of fermentation and fructose concentration on agave juice fermentation. Selection of DistiaMax° AG Mexico 2023
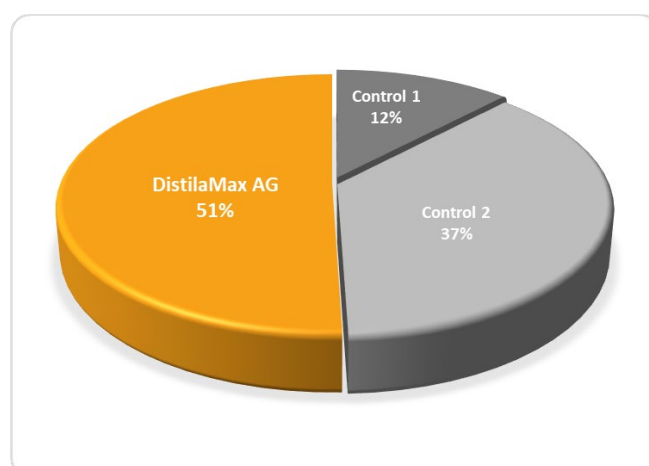
Figure 2: Preference test on the spirits obtained during the selection of DistiaMax° AG. Panel of 21 people.

DistilaMax™ AG
Specific selected Mexican yeast strain
for agave-based spirits production

CHARACTERISTICS

- Solids (dry weight): 95.5 +/-2.5 %
- Viable cells (CFU/g): > 1 x 10^e10
- Total wild yeast (CFU/g): < 1000

DistilaMax AG is not genetically modified and is Kosher.

DOSAGE

- The optimal yeast dosage is variable according to individual distillery production processes.
- Normal dose rate 0.25 - 0.50 grams per litre of wash or juice (dosage: 250 - 500 ppm).
- For the fermentation of agave syrup: dose rate: 0.40 – 0.70 grams per litre of wash with addition of dedicated nutrition.

INSTRUCTIONS OF USE

Lallemand Biofuels & Distilled Spirits recommends the rehydration of DistilaMax AG.

- For rehydration, use a clean container. Do not use demineralized water.
- Rehydrate the yeast in clean water (the water should be 10 times the weight of the yeast and at a temperature of 36 °C – 38 °C).
- Suspend contents carefully by gently stirring and then wait for 15 - 20 minutes maximum (minimum 10 minutes) before moving onto the next step.
- Add this preparation to the wash. If there is a temperature difference of more than 8°C between the wash to be inoculated and the rehydration solution, add some wash slowly into the rehydration solution to reduce the temperature difference.
- Once the vacuum-sealed bag is open or broken, use yeast promptly.

0.25 - 0.5 g/L

36°C - 38°C

Potable water 10x
weight of yeast

15
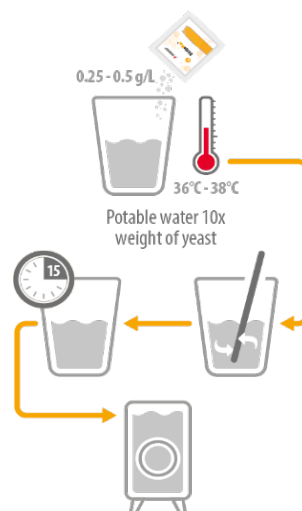
STORAGE, HANDLING AND PACKAGING

- DistilaMax AG should be stored in a cool and dry area away from heat and direct sunlight for maximum stability.
- Shelf Life: 3 years from date of production if vacuum-seal is not broken.
- Packaging: DistilaMax AG is available in vacuum-sealed foil bags in 10 kilograms and boxes of 20 x 500 grams.

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