

Instructions for use

The fermentation of cocoa is a biological process.

It is the simultaneous degradation of mucilage and release of varietal specific aroma compounds in the cocoa beans by specific microorganisms, especially yeasts.

 $LALCOCOA^{\text{TM}}$ yeasts have been selected from nature to secure the quality and unlock the flavor of the cocoa.



LALCOCOA™ yeast will help to:

- Better fermentation control.
- Speed up the fermentation process.
- Impact positively on aroma expression. This phenomena has been proven via several years of lab and field research.



How to use LALCOCOA™ yeast?

- The yeasts have been dried for easy transportation and storage.
- Before adding them to the freshly harvested cocoa beans, the yeast must be rehydrated in ambient water (15-37°C) during 20 minutes.
- After 20 minutes, the rehydrated yeast must be added to the tank and mixed well. The moment and timing of yeast addition depends on the quantity of cocoa beans in the tank.
- For best results, LALCOCOA[™] yeast should be in contact with the cocoa beans for 5 to 6 days (please see the technical data sheet of LALCOCOA[™] yeast to check their best duration of fermentation).







LALCOCOA™ yeast rehydration & inoculation protocol

Dosage: 2 g of dry LALCOCOA™ yeast per 1 kg of cocoa beans

Preparation





Calculate your volume of potable water for LALCOCOA™ yeast rehydration. The volume of water is 10 times the weight of LALCOCOA™ yeast (for 1 kg of yeast you need to prepare 10 liters of potable water).



For example: for 300kg of fresh cocoa beans, you need to prepare 600g of LALCOCOA $^{\text{\tiny M}}$ yeast, and prepare 6 liters of ambient water (15-37°C). Use a clean container (free of any chemical or organic matter: fats, smells, soap...) for the rehydration step.

Yeast rehydration





Suspend slowly the LALCOCOA $^{\text{TM}}$ yeast into the potable water. Stir gently to break up any lumps. Wait at least 10 minutes before gently stirring again to break up any remaining lumps. Wait again for 10 to 20 minutes before adding to the tank with the fresh cocoa beans.

Note: Foaming is not an indicator of viability, or fermentative activity of the yeast.

Yeast inoculation



After 20-30 minutes of rehydration, add the yeast suspension to the tank of fresh cocoa beans during filling. In order to ensure the best dispersion of the LALCOCOA $^{\text{m}}$ yeast throughout the cocoa beans, follow the recommendations below.

Up to 300 kg: put the freshly harvested cocoa in the tank then add the yeast at once and stir. The tank must be free of any chemicals or other compounds that could impact on cocoa flavor.

From 300 kg to 1000 kg: add the yeast in three intervals, at each third of the tank, add a part of the rehydrated yeast then stir to homogenize.

At the end of the filling, cover the tank with sacks or banana leaves **to favor** anaerobic conditions.

Optimal fermentation duration shall not exceed 8 days and must last a minimum of a day (depending on the mucilage amount and protocol in place).



