



LAFASE® XL G-AMYL

Highly concentrated glucoamylase enzyme formulation for the production of grain-based beverages (Exo-1,4-D-glucosidase: EC.3.2.1.3.)

Suitable for the preparation of products intended for direct human consumption, non-GMO product. Complies with EU regulations 1332/2008, 1333/2008, JECFA and the French order of 19/10/2006 on the use of processing aids.

SPECIFIC CHARACTERISTICS AND PROPERTIES

LAFASE® XL G-AMYL hydrolyses the bonds of starch, dextrans and oligosaccharides from the non-reducing end of the chain to form D-glucose.

LAFASE® XL G-AMYL optimises the conversion of starch into fermentable sugars (better attenuation) and minimises residual carbohydrates (fewer calories).

- Optimum pH 3.8 - 4.2.
- Optimum temperature: around 65°C (149°F).

PHYSICAL CHARACTERISTICS

Appearance	liquid	Standardisation activity (U/mL).....	1,600 s-Amylase
Colour	brown	Approximate density (g/mL)	1100 - 1300
Insoluble matter	none		

CHEMICAL AND MICROBIOLOGICAL ANALYSES

Toxins and mycotoxins	not detectable	Lead (ppm).....	<5
Total aerobic mesophilic flora	<5.10 ⁴ CFU/mL	Arsenic (ppm).....	<3
Coliforms (CFU/g)	<30	Mercury (ppm)	<0.5
<i>E.coli</i> (/25 g)	none	Cadmium (ppm)	<0.5
<i>Salmonella</i> (/25 g)	none		

COMPOSITION

Water, glucoamylase, sodium benzoate (E211 - 0.3%), potassium sorbate (E202 - 0.2%).

PROTOCOL FOR USE

CONDITIONS AND IMPLEMENTATION

- To be added to the grain load or at the wort stage.
- The dose and time of application must be respected. Later application during fermentation or storage leads to separation of the glucose and may result in a change in taste (stronger impression of sweetness) if the dose is not correct.

DOSAGE AND AND REGULATIONS

- Saccharification during the production of alcohol from starchy raw materials: 500 ml/tonne of raw material.
- Beer: 50 - 200 mL/t in the grain load
- Worts and young beers: 2 - 10 mL/hL.
- Decomposition of residual starch in the production of apple juice concentrate: 10 - 25 mL/1,000 L of juice (12° Bx)

The user should check national regulations.

ADDITION

Dilute LAFASE® XL G-AMYL in cold water and add during a pump-over. The reduction in activity due to the temperature in the washback is taken into account in the recommended dose. This ensures optimum effect even at temperatures of around 2°C (36°F).

We recommend carrying out preliminary laboratory tests to predict the impact on the final product.

STORAGE RECOMMENDATION

- Store off the ground in the original unopened packaging in a cool (2 - 10°C / 36 -50°F) and dry area not liable to impart odours.
- Optimal date of use: 3 years.

PACKAGING

1 L / 1.1 kg jerry can.