



FERMOPLUS® GSH

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 Nutrient with high anti-oxidant action used for beer fermentation during propagation stage



→ TECHNICAL DESCRIPTION

Yeast extract, specifically selected by the biotechnological unit of AEB to optimize yeast development during propagation stage while protecting the yeast with natural anti-oxidant glutathion.

Fermoplus GSH comes from a specific *Saccharomyces cerevisiae* selected to feed low fermentation yeast. Its particular efficiency within the first propagation tank, and, can be added until the last propagation stage according to situation.

High anti-oxidant capacity: its metabolic purpose during fermentation. The innovative characteristic of **Fermoplus GSH** is its capacity to bring a large amount of glutathione. The yeast strain, which produces naturally glutathione and the AEB manufacturing protocol maximise the quantity of glutathione. Glutathione, an atypical tripeptide (L-Glutamyl-L-cysteinylglycine), is the most powerful natural biological reducer existing, protecting yeast cell against free radicals and oxidation damages.

In case of dry yeast utilisation, during rehydration, living cells consume oxygen for multiplication but do not have the capacity to produce glutathione. **Fermoplus GSH** allows them to be protected against oxidative stress and synthesise the glutathione afterwards when propagation begins. The concentration reaches up to 9% of dry matter.

In the first stages of fermentation, **Fermoplus GSH** nutrient are widely consumed and the concentration of glutathione decrease a lot. This is the exponential stage. The amount of glutathione increase at the end of fermentation, the few dying cells releasing this fraction.

The protection objective of the yeast during exponential stage is to guaranty an identical quality cells, whatever the generation it is. Protecting against oxidation the yeast strain and other aminoacid will prevent off flavour to appear.

→ COMPOSITION AND TECHNICAL CHARACTERISTICS

Yeast hulls, autolysates of yeast, thiamine hydrochloride (vitamin B1).

→ DOSAGE

From 10 to 50 g/hL in rehydration stage. In case of low vitality of strain, add 5 g/hL into the fermentation tank. In case of low vitality of strain, add 5 g/hL into the fermentation tank.





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→ INSTRUCTIONS FOR USE

Hydrate in sterile water (1:10) or directly add to the fermentation medium during the rehydration stage.

→ ADDITIONAL INFORMATION

How to guaranty a high level of glutathione?

The strain is developed, dried and directly leased within an atomisation tower. Afterwards, analysis are made for traceability and standardisation of our process (enzymatic analysis, HPLC, PCR).

→ STORAGE AND PACKAGING

Store in a cool dry place, away from direct sunlight and heat.

1 kg net packs in cartons containing 4 kg.

10 kg bags.

