Pure Fermentation SIHA® PROFERMTM Plus

Diammonium Hydrogen Phosphate + Ammonium Sulphate + Vitamin B₁ + Special Yeast Rind Preparation

SIHA PROFERM Plus combined yeast nutrient is a new, optimized combination product consisting of diammonium hydrogen phosphate, ammonium sulphate, vitamin B₁ and a special yeast rind preparation. This special nutrient combination ensures that nitrogen, phosphate and vitamin deficiencies in a crop of grapes are compensated. The preconditions for a quick development of the yeast metabolism are significantly improved. SIHA PROFERM Plus combined yeast nutrient helps to prevent fermentation defects during wine preparation, particularly in the case of decayed grapes, highly pre-clarified musts, and if there is a suspicion that spray residues may be present.

The specific advantages of SIHA PROFERM Plus combined yeast nutrient:

- Optimized combination of nutrients and minerals
- Better, faster yeast reproduction
- Ensures adequate supply of essential nutrients in musts from undernourished vineyards
- Undisturbed fermentation even in difficult musts
- Enlarges the internal surface area during fermentation
- High adsorption potential for fermentation inhibiting yeast toxins (e.g. spray residues)

Application and Dosage

The maximum permitted SIHA PROFERM Plus combined yeast nutrient dosage is 3.3 lb/1,000 gal (40 g/hl).

Add SIHA PROFERM Plus combined yeast nutrient to the must immediately prior to the addition of the reactivated dry active yeast (e.g. SIHA Active Yeast 7 (Riesling Yeast)). Further addition of SIHA PROFERM Plus combined yeast nutrient halfway through alcoholic fermentation may be desirable. From halfway through the fermentation, the active yeast cells can utilize the inactive yeast cell wall component (yeast rind). EEC Directive No. 822/87, Appendix VI, restricts the quantity to the maximum dose quoted above. Dosages of more than 3.3 lb/1,000 gal (40 g/hl) would lead to the limit values for the specified ingredients to be exceeded.

Ensure proper mixing of the must!

Product Characteristics

The application of SIHA PROFERM Plus combined yeast nutrient improves the fermentation conditions. Foreign substances acting as yeast toxins (e.g. spray residues) are adsorbed, and the internal surface area of the must is enlarged. The fermentation curve is improved, and the degree of final fermentation is optimized.

The risk of formation of undesirable fermentation by-products such as SO_2 , H_2S , acetaldehyde, pyruvic acid pyruvate, (α -ketoglutarate, volatile acid, and ester) is reduced, resulting in a significantly lower SO_2 demand. The risk of fermentation-related disturbances is minimized, allowing the character of the wine to develop fully.

SIHA PROFERM Plus combined yeast nutrient is an effective aid for the final fermentation of wines where fermentation has become "stuck".

Nutrient	Effect
Vitamins	good development of the yeast cells
Nitrogen N ₂	synthesis of amino acids and proteins
Arginine	affects the nitrogen cycle
Oxygen	yeast reproduction and sterol synthesis
Minerals Mg, Zn	for fermentation and as enzymatic co- factor safeguarding of metabolic functions
Sterols	indispensable for the membrane synthesis during cell activity
Fatty acids	unsaturated fatty acids are essential for fermentation

Safety

For the prior addition of SIHA Fermentation Salt yeast nutrient fermentation aid and/or SIHA Vitamin B_1 yeast nutrient fermentation aid, the legal limit values must also be adhered to.

When used and handled correctly, there are no known unfavorable effects associated with SIHA PROFERM Plus combined yeast nutrient.

Further safety information can be found in the relevant Material Safety Data Sheet, which can be downloaded from our website.



Storage

SIHA PROFERM Plus combined yeast nutrient can be stored at a temperature of $39-50\,^{\circ}\text{F}$ ($4-10\,^{\circ}\text{C}$) for a period of three years as long as the packaging is intact. The product may be stored at 68 °F (20 °C) for short periods.

Opened packages should be used up immediately.

Delivery Information

SIHA PROFERM Plus combined yeast nutrient is sold under article no. 96.060 and is available in the following package sizes:

2.2 lb (1 kg) aluminum foil block pack

25 x 2.2 lb (1 kg) aluminum foil block packs in carton 22 lb (10 kg) aluminum foil block packs in carton

HS Customs Tariff: 3821 00 00

Certified Quality

During the production process, SIHA PROFERM Plus combined yeast nutrient is monitored constantly to ensure consistently high quality. These inspections cover technical function criteria as well as conformance with the relevant laws governing the production and sale of foodstuffs. Strict controls are carried out immediately before as well as during final packaging.

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For more information, please email us at *filtration* @eaton.com or visit www.eaton.com/filtration

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