## Technical Information

## Yeast nutrient SIHA<sup>®</sup> SpeedFerm<sup>™</sup>



# Used Prior to the Alcoholic Fermentation of Dry Active Yeasts

SIHA SpeedFerm yeast nutrient from Eaton's Begerow Product Line is a special yeast nutrient mixture made from inactive yeasts, containing vitamins (e.g. pantothenate, biotin), minerals (magnesium, zinc, manganese), and amino acids.

SIHA SpeedFerm yeast nutrient contains micronutrients that have a targeted effect prior to alcoholic fermentation. Especially after rehydration, when the enzyme and substrate traffic systems have been formed, yeast cells are able to absorb micronutrients and to accumulate them intracellularly, so that the cells have continuous access to this intracellular nutrient pool during alcoholic fermentation. Optimum yeast nutrition with SIHA SpeedFerm yeast nutrient therefore ensures a safe final degree of fermentation and a higher proportion of living cells up to the end of alcoholic fermentation.

The specific advantages of SIHA SpeedFerm yeast nutrient:

- Improves nutrient supplementation after rehydration and during changes in pure yeast temperature prior to alcoholic fermentation
- Reduces the formation of H<sub>2</sub>S during alcoholic fermentation
- Promotes cell reproduction
- Increases the proportion of active cells during the entire fermentation process up to the end of fermentation
- Ensures a better final degree of fermentation, particularly during cold fermentation

## SIHA SpeedFerm Yeast Nutrient Vitamin Spectrum

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Vitamins	gr/10 oz (mg/100 g)		
B <sub>1</sub> (thiamin)	83.22 (1.9)		
B <sub>2</sub> (riboflavin)	0.18 (4)		
PP (niacin)	1.97 (45)		
B <sub>5</sub> (pantothenic acid)	0.18 (4)		
B <sub>6</sub> (pyrimidine)	0.44 (10)		
B <sub>8</sub> (biotin)	0.0044 (0.1)		
B <sub>9</sub> (folinic acid)	0.088 (2)		
B <sub>12</sub> (μg/100 g)	0.00088 (0.02)		

SIHA SpeedFerm Yeast Nutrient Mineral Spectrum

Minerals	gr/10 oz (mg/100 g)		
Sodium	8.8 (200)		
Calcium	35.04 (800)		
Iron	4.4 (100 ppm)		
Zinc	1.53 (35 ppm)		
Phosphorus	65.7 (1,500)		
Potassium	70.08 (1,600)		
Magnesium	8.76 (200)		
Copper	1.53 (35 ppm)		
Manganese	0.22 (5 ppm)		

These values may fluctuate.

SIHA SpeedFerm Yeast Nutrient Amino Acid Spectrum

Minerals	gr/10 oz (mg/100 g) (no absolute values)
Methionine	0.35 (8)
Cysteine	0.23 (5,2)
Lysine	1.58 (36)
Threonine	1 (23)
Tryptophane	0.22 (5)
Arginine	0.98 (22.3)
Glycine	0.88 (20)
Histidine	0.48 (11)
Isoleucine	1.05 (24)
Leucine	1.4 (32)
Phenylalanine	0.83 (19)
Vanillin	1.2 (27)
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These values may fluctuate.



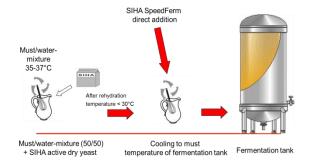


#### **Application**

SIHA SpeedFerm yeast nutrient is used after the rehydration of dry active yeasts (see graphic). SIHA SpeedFerm yeast nutrient is best applied during the change in temperature between dry active yeasts already rehydrated (temperature < 86 °F (30 °C)) and the tank to be inoculated (e.g. < 68 °F (20 °C)).

The product can be added directly without being dissolved.

#### **Application scheme**



Application		Quantity required lb/1,000 gal (g/hl) under		
	normal	difficult		
	fermentation	fermentation conditions		
Before alcoholic fermentation	1.7 – 2.5 (20 – 30)	2.9 (35)		
For suspended fermentation	2.5 - 3.3 $(30 - 40)$	3.3 (40)		

SIHA SpeedFerm yeast nutrient specifically aids the dry active yeast and is not a substitute for nitrogen dosage prior to fermentation or during alcoholic fermentation. The yeast should be additionally supplied with nutrients during alcoholic fermentation using SIHA Fermentation Salt yeast nutrient (diammonium phosphate), SIHA Fermentation Salt Plus yeast nutrient (diammonium phosphate, SIHA Vitamin B<sub>1</sub> yeast nutrient, cellulose) for intensively pre-clarified musts, or the SIHA PROFERM<sup>TM</sup> Plus combined yeast nutrient preparation.

## **Product Characteristics**

SIHA SpeedFerm yeast nutrient ensures that yeast is supplied with important microelements. Microelements are essential enzyme cofactors that control the transport of sugar to the yeast cells on the one hand, and aid the intracellular traffic of the yeast on the other.

Adding SIHA SpeedFerm yeast nutrient prior to alcoholic fermentation results in an increased proportion of active cells throughout the entire alcohol fermentation process. The result is an assured degree of final fermentation and increased resistance of the yeast to stress factors, such as nutrient deficiency, temperature shocks, and toxic components. The optimum composition of inactive yeasts, vitamins, minerals, and other micronutrients makes product handling easier. The product dissolves very well in water, must, or must/water mixtures.

#### Safety

No safety specifications are required for SIHA SpeedFerm yeast nutrient as this product is used directly for food production. Storing, handling, and transporting this product do not create health or environmental hazards.

Additional information: generally not harmful to water according to the German VwVwS regulations of 1999 (Administrative Regulation on the Classification of Substances Hazardous to Waters into Water Hazard Classes).

#### Storage

SIHA SpeedFerm yeast nutrient is supplied in aluminum pouches. The product is not vacuum packed.

SIHA SpeedFerm yeast nutrient can be stored at room temperature (max. 68 °F (25 °C)) for a period of three years as long as the packaging remains intact.

Use up any remaining product quickly once the packaging has been opened.

#### **Delivery Information**

SIHA SpeedFerm yeast nutrient is sold under article no. 96.101and is available in the following package sizes:

2.20 lb (1 kg) aluminum pouch

10 x 2.20 lb (1 kg) carton

5.51 lb (2.5 kg) aluminum pouch

4 x 5.51 lb (2.5 kg) carton

HS Customs Tariff: 3821 00 00

#### **Certified Quality**

SIHA SpeedFerm yeast nutrient is inspected regularly during the production process to ensure uniformly high product quality.

These inspections include technical functional criteria as well as safety in accordance with the relevant laws governing the production of foods. Strict controls are carried out immediately prior to and during final packaging.

SIHA SpeedFerm yeast nutrient meets the purity criteria of the International Codex for Wine Processing Agents and complies with the German Wine Law.

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For more information, please e-mail us at filtration@eaton.com or visit us online at eaton.com/filtration for a complete list of Eaton's filtration products.

Not all products in Eaton's Begerow Product Line are available in all regions. Please contact your local Eaton office to determine availability.

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