### Technical Information

# Pure Fermentation SIHA® VARIOFERM™



SIHA VARIOFERM yeast from Eaton's Begerow Product Line is a highly active dry yeast combination of saccharomyces cerevisiae D4, SF8 and U17 for reliable and pure fermentation without negative taste influences in wine processing. The yeast strains were selected especially for use in a combined product according to all-important enological criteria (moderate fermentation; high dominance over spontaneous flora; negligible frothing; rapid sedimentation). Therefore, the harvest has a greater influence on the proportions of yeast strains that control fermentation. The product guarantees greater variation and natural variety, while offering the same all-round reliability of dry pure culture yeasts.

The specific advantages of SIHA VARIOFERM yeast:

- Same all-round reliability of dry pure culture veasts
- The positive properties of three specially selected yeast strains complement each other in an ideal manner
- The must determines the yeast strains which control fermentation and their respective proportions
- Greater variation and natural variety in wine processing

## **Application and Application Quantities**

The musts should be treated with SIHA VARIOFERM yeast as soon as possible. Longer periods of standing favor the uncontrolled reproduction of wild yeasts and unwanted bacteria.

Recommended dosage (standard value): 1.7 lb/1,000 gal (20 g/hl)

These quantity is a guideline and should be adjusted to suit the individual conditions (health of the material harvested, temperature, presence of fungicide residue, container size etc.).

The fermentation temperature range is between 50 °F (10 °C) and 95 °F (35 °C), the optimum fermentation temperature is between 64 °F (18 °C) and 71 °F (22 °C). When using large containers, care should be taken to provide for adequate cooling.

SIHA VARIOFERM yeast is best stirred into the 10-fold quantity of juice-water mixture at 68-86 °F (20-30 °C) left for about 10 minutes, then stirred thoroughly again and added to the must. Mixing in is unnecessary if the must is pumped onto the yeast preparation.

The yeast can also be added directly to the must without suspension. In this case the period until fermentation begins is extended by only a few hours. However, to ensure reliable preliminary fermentation the yeast quantity should be increased by about 20%.

The addition of 3.3 lb/1,000 gal (40 g/hl) SIHA VARIOFERM yeast (a special yeast rind/yeast nutrient combination to avoid disturbances in the fermentation process) creates even better fermentation and metabolic conditions and is particularly recommended in the case of extremely pre-clarified musts or if pesticide residues are expected.

#### **Product Characteristics**

The yeast strains selected for SIHA VARIOFERM yeast were chosen especially with a view to their use in a combined product. All are distinguished by clean metabolism and produce hardly any unwanted side products during fermentation, such as  $SO_2$ ,  $H_2S$ , acetaldehyde, pyruvic acid (pyruvate),  $\alpha$ -ketoglutaric acid, volatile acids, and ester. This prevents any taste influence caused by off-tones during fermentation.

The yeast can produce up to 16% alcohol by volume. The practical alcohol yield is approximately 47% of the sugar content. For each lb (kg) of sugar fermented, approx. 247 kJ (546 kJ)/59 kcal (130 kcal) of heat is released.

SIHA VARIOFERM yeast has at least 20,000 million viable fermentative yeast cells per gram. Microorganisms injurious to beverages are not present.

#### Safety

No technical safety data are given as these products are used directly in the production of foodstuffs. There is no danger for personnel and environment during storage, handling, and transportation.





#### Storage

SIHA VARIOFERM yeast is packed in airtight aluminum sandwich foil using inert gas. The block pack is vacuum-sealed. It is easy to check that the package is intact.

It can be stored for four years at 39-50 °F (4-10 °C) in an undamaged package. It can be stored for a short time at temperatures of up to 68 °F (20 °C).

Opened packages should be used up immediately.

## **Delivery Information**

SIHA VARIOFERM yeast is sold under article no. 93.100 and is available in the following package sizes:

1.1 lb (500 g) aluminum foil block pack

20 x 1.1 lb (500 g) aluminum foil block pack

in cartor

HS Customs Tariff: 2102 10 90

#### **Certified Quality**

SIHA VARIOFERM yeast is monitored regularly during the production process to ensure consistently high quality. These inspections cover technical function criteria as well as compliance with the law governing the production and sale of foodstuffs. Strict controls are also carried out immediately before and during final packing.

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