

Beverage Stabilization

SIHA Actiliq GE

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10/2003

SIHA Actiliq GE is a specially formulated activated carbon with vegetable origin for the use in the beverage industry with mainly deodorizing properties. SIHA Actiliq GE is a high-purity activated carbon of vegetable origin with deodorizing characteristics, specially formulated for the requirements of the beverage industry. In contrast to powder carbon, SIHA Actiliq GE ensures simple handling with minimum dust formation. The special activation technique creates a pore structure with a specific adsorption effect for undesirable odors and flavors.

SIHA Actiliq GE can be used for mashes, musts, wines, sweet must, juices, spirits and beer.

The special advantages of SIHA Actiliq GE are:

- ▶ Feeding of the product into the container with low dust formation
- ▶ Adsorbs undesired aroma and flavour substances in beverages
- ▶ Large inner surface and therefore high adsorptive capacity
- ▶ It builds a compact turbidity depot thanks to good sedimentation

Application Wine, Fruit Juice, Spirits

In order to use the full adsorptive power of SIHA Actiliq GE we recommend that carbon fining will be carried out in the clarified and filtered beverage to prevent displacement of the active surface through turbidities.

If used in combination with another fining agent, SIHA Actiliq GE should always be added first in order not to reduce the high adsorptive capacity of the carbon.

We recommend that the quantity of SIHA Actiliq GE determined by a preliminary test be mixed to a paste with a small amount of the beverage in order to completely moisten the powder. Then add more beverage to the paste to allow a quantitative rinsing of the entire batch. Afterwards, it is necessary to stir vigorously to guarantee an even distribution of the product in the beverage. Depending on the action of the agitator, the stirring time should be 10 to 20 minutes.

After approx. 1 h the beverage should be thoroughly stirred once again to utilize the full adsorptive capacity of SIHA Actiliq GE. As the carbon develops its adsorptive power as soon as it is added, fining takes just a few hours.

Racking by filtration should follow after two days at the latest.

Quantities required:

- ▶ To correct undesired flavours in wines due to the vintage or rot, a quantity of 30 – 50 g/hl SIHA Actiliq GE is required; for best results correction should be done in the mash or in the must; a quantity of 30 – 80 g/hl can be used, depending on the strength of the foreign taste.
- ▶ To treat the desliming or separator turbidity a quantity of 80 – 100 g/hl SIHA Actiliq GE is required.
- ▶ To remove rot, barrel, mould and other foreign aromas or flavours in wines and juices, 10 – 40 g/hl SIHA Actiliq GE should be used.
- ▶ To treat fresh yeast sediment up to 100 g/hl SIHA Actiliq GE is required.
- ▶ The taste of beverages can be harmonized and rounded off with just 3 – 5 g/hl SIHA Actiliq GE.
- ▶ Wines with a bitter or rape taste can also be improved with 10 – 50 g/hl SIHA Actiliq GE.
- ▶ To improve the flavour of spirits a quantity of at least 100 g/hl SIHA Actiliq GE is required - in some cases 200 – 500 g/hl to prevent a mouldy-musty aroma or flavour. The spirits should be qualified to drinking strength.

Application Beer

For application in beer, pre-application tests are also recommended in order to determine the quantity required.

If the last wort is reused, colour intensification and a broad, hard beer taste may be expected. This can be counteracted by adding activated carbon to the last wort with a dosage of approx. 100 g/100 l.

Slight imperfections in the beer, such as yeast bitterness or a broad or slightly oxidized taste, can be corrected by using only about 5 – 10 g/100 l (even in returned beer). However, in most cases, it is recommended to re-kransen beer which has been treated with activated carbon (approx. 20 %) and to blend it with faultless beer depending on requirements. The carbon should be added 5 – 7 days prior to filtration, preferably by turning over the tanks. This procedure can remove even more severe imperfections, such as smoky taste or similar faults. Diacetylic taste or similar imperfections are not influenced by activated carbon.

Pre Application Test

The exact quantity of SIHA Actiliq GE is best determined by performing initial tests with 100 ml of the beverage. For this, a 5 % suspension of SIHA Actiliq GE is prepared. The suspension is then pipetted to 100 ml of the beverage in increasing quantities.

0.2 ml of the 5 % suspension per 100 ml beverage corresponds to a quantity of SIHA Actiliq GE of 10 g/hl.

The initial tests should be carried out according to the following table:

SIHA Actiliq GE suspension in 100 ml	Corresponding quantity to be added to the beverage
0.4 ml	20 g/hl
0.8 ml	40 g/hl
1.2 ml	60 g/hl
1.6 ml	80 g/hl
2.0 ml	100 g/hl

Intermediate values can be chosen accordingly.

The fining preparations should be stirred vigorously and then filtered off through a pleated filter which has been sufficiently wetted beforehand. The first 10 ml of the filtrate is discarded. The filtrate is then tasted and compared with the initial sample. The exact quantity of SIHA Actiliq GE is determined by tasting the samples.

The application quantity of activated carbon for wine treatment (white wine, white wine musts) is limited by the Directive EEC n°822/87 to a maximum of 100 g/hl.

Safety

If used properly and correctly no detrimental effects of SIHA Actiliq GE are known. An EU Safety Data Sheet is available on request.

Storage

SIHA Actiliq GE stores well. Due to high adsorptive capacity of the carbon, it has to be stored in a dry, cool, well ventilated and odourless room. Opened packages should be sealed tight and used up quickly.

Delivery Information

SIHA Actiliq GE is sold under article number 63.107 and is available in the following package sizes:

20 kg paper bag
5 kg PE-film
1 kg PE-film

H.S. Customs Tariff. No.: 3802 10 00

Cerified Quality

SIHA Actiliq GE complies with all pertinent legal requirements. It is monitored constantly during the production process to ensure consistently high quality.

These inspections cover technical function criteria as well as approval in accordance with the law governing the production and sale of foodstuffs. Strict controls are carried out immediately before and during final packing.

SIHA Actiliq GE complies with the purity criteria of the International Codex for wine treatment products and with the specifications of the German Wine Code familiar to us.



Reg. No. 000480 QM

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