Technical Data Sheet

Beverage Stabilization SIHA® Actiliq GE

SIHA Actiliq GE fining agent is a specially formulated activated carbon with vegetable origin for the use in the beverage industry with mainly deodorizing properties. SIHA Actiliq GE fining agent 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 fining agent 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 fining agent can be used for mashes, musts, wines, sweet must, juices, spirits, and beer.

The special advantages of SIHA Actiliq GE fining agent:

- Feeding of the product into the container with low dust formation
- Adsorbs undesired aroma and flavor 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 fining agent 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, always add SIHA Actiliq GE fining agent first in order not to reduce the high adsorptive capacity of the carbon.

We recommend that the quantity of SIHA Actiliq GE fining agent 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, stir the beverage thoroughly once again to utilize the full adsorptive capacity of SIHA Actiliq GE fining agent. 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 flavors in wines due to the vintage or rot, a quantity of 2.5 4.17 lb/1,000 gal (30 50 g/hl) SIHA Actiliq GE fining agent is required. For best results, correction should be done in the mash or in the must; a quantity of 2.5 6.68 lb/1,000 gal (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 6.68 – 8.35 lb/1,000 gal (80 – 100 g/hl) SIHA Actiliq GE fining agent is required.
- To remove rot, barrel, mold and other foreign aromas or flavors in wines and juices,
 0.83 – 3.34 lb/1,000 gal (10 – 40 g/hl)
 SIHA Actiliq GE fining agent should be used.
- To treat fresh yeast sediment, up to 8.35 lb/1,000 gal (100 g/hl) SIHA Actiliq GE fining agent is required.
- The taste of beverages can be harmonized and rounded off with just 0.25 – 0.42 lb/1,000 gal (3 – 5 g/hl) SIHA Actiliq GE fining agent.
- Wines with a bitter or rape taste can also be improved with 0.83 – 4.17 lb/1,000 gal (10 – 50 g/hl) SIHA Actiliq GE fining agent.
- To improve the flavor of spirits, a quantity of at least 8.35 lb/1,000 gal (100 g/hl) SIHA Actiliq GE fining agent is required in some cases, 16.69 41.73 lb/1,000 gal (200 500 g/hl) to prevent a moldy-musty aroma or flavor. The spirits should be qualified to drinking strength.
- The activated carbon dosage for wine treatment is limited to a maximum of 8.35 lb/1,000 gal (100 g/hl).

Application Beer

For application in beer, Eaton recommends preapplication tests in order to determine the quantity required.

If the last wort is reused, color 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. 8.35 lb/1,000 gal (100 g/hl).

Slight imperfections in the beer, such as yeast bitterness or a broad or slightly oxidized taste, can be corrected by using only about 0.42-0.83 lb/1,000 gal (5-10 g/hl, even in returned beer). However, in most cases, Eaton recommends to re-krausen beer that has been treated with activated carbon (approx. 20%) and to blend it with faultless beer depending on requirements. Add the carbon 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 fining agent is best determined by performing initial tests with 3.38 fl oz (100 ml) of the beverage. For this, a 5% suspension of SIHA Actiliq GE fining agent is prepared. The suspension is then pipetted to 3.38 fl oz (100 ml) of the beverage in increasing quantities.

0,007 fl oz (0.2 ml) of the 5% suspension per 3.38 fl oz (100 ml) beverage corresponds to a quantity of SIHA Actiliq GE fining agent of 0.83 lb/1,000 gal (10 g/hl).

Carry out the initial tests according to the following table.

SIHA Actiliq GE fining agent suspension fl oz/gal (ml in 100 ml)	Corresponding quantity to be added to the beverage lb/1,000 gal (g/hl)
0.51 (0.4)	1.67 (20)
1.02 (0.8)	3.34 (40)
1.54 (1.2)	5.01 (60)
2.05 (1.6)	6.68 (80)
2.56 (2.0)	8.35 (100)

Choose intermediate values accordingly.

Stir the fining preparations vigorously and then filtered off through a pleated filter that has been sufficiently wetted beforehand. The first 0.34 fl oz (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 fining agent 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 8.35 lb/1,000 gal (100 g/hl).

Safety

If used properly and correctly no detrimental effects of SIHA Actiliq GE fining agent are known.

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

Storage

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

Delivery Information

SIHA Actiliq GE fining agent is sold under article no. 63.107 and is available in the following package sizes:

2.2 lb (1 kg) PE bag11.02 lb (5 kg) PE bucket44.09 lb (20 kg) paper bag

Certified Quality

SIHA Actiliq GE fining agent 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.

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