

## Beverage Stabilization

### SIHA Activated Carbon GE/P

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**SIHA Activated Carbon GE/P is a specially formulated activated carbon with vegetable origin for the use in the beverage industry with mainly deodorizing properties. This highly pure carbon of vegetable origin is used to correct aroma and flavour defects in beverages.**

**Through a special, very gentle activation process the pore structure of the activated carbon is made specially capable of binding undesired aroma and flavour substances in beverages.**

SIHA Activated Carbon GE/P can be used for mashes, musts, wines, sweet must, juices and spirits

- ▶ The special advantages of SIHA Activated Carbon GE/P are:
- ▶ It adsorbs undesired aroma and flavour substances in beverages.
- ▶ It has a large inner surface and therefore results a 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 Activated Carbon GE/P 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 Activated Carbon GE/P should always be added first in order not to reduce the high adsorptive capacity of the carbon.

We recommend that the quantity of SIHA Activated Carbon GE/P 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 Activated Carbon GE/P. 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 Activated Carbon GE/P 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. The rule of thumb is: for each % of rotten harvest use 1 g SIHA Activated Carbon GE/P per hl.
- ▶ To treat the desliming or separator turbidity a quantity of 80 – 100 g/hl SIHA-Aktivated Carbon GE is required.
- ▶ To remove rot, barrel, mould and other foreign aromas or flavours in wines and juices, 10 – 140 g/hl SIHA Activated Carbon GE/P should be used.
- ▶ To treat fresh yeast sediment up to 100 g/hl SIHA Activated Carbon GE/P is required.
- ▶ The taste of beverages can be harmonized and rounded off with just 3 – 5 g/hl SIHA Activated Carbon GE/P.
- ▶ Wines with a bitter or rape taste can also be improved with 10 – 50 g/hl SIHA Activated Carbon GE/P.
- ▶ To improve the flavour of spirits a quantity of at least 100 g/hl SIHA Activated Carbon GE/P is required - in some cases 200 – 500 g/hl to prevent a mouldy-musty aroma or flavour.

#### 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, 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. 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 5 – 10 g/hl. (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 Activated Carbon GE/P is best determined by performing initial tests with 100 ml of the beverage. For this, a 5 % suspension of SIHA Activated Carbon GE/P 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 Activated Carbon GE/P of 10 g/hl.

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

SIHA Activated Carbon GE/P 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 Activated Carbon GE/P is determined by tasting the samples.

### Safety

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

### Storage

SIHA Activated Carbon GE/P 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 Activated Carbon GE, article number. 63.101:

20 kg      paper bag

SIHA Activated Carbon P, article number 63.105:

1 kg      PE-bag activated carbon  
20 x 1 kg      PE-bag in cardboard box activated carbon

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

### Cerified Quality

SIHA Activated Carbon GE/P 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 Activated Carbon GE/P complies with the purity criteria of the International Codex for wine treatment products and with the specifications of the German Wine Code we know at the moment.



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