Technical Information

Beverage Stabilization SIHA® CARBOGRAN FA



SIHA CARBOGRAN FA from Eaton's Begerow Product Line is a purified activated carbon of vegetable origin that is capable of correcting color defects. The gentle activation process changes the inner surface of the carbon, making it specifically capable of adsorbing coloring substances.

Thanks to a specially developed and gentle granulation process the adsorptive capacity of the powdered product is fully retained in the granulate.

SIHA CARBOGRAN FA activated carbon can be used for wines, sweet must, juices, spirits, and sugar solutions.

The specific advantages of SIHA CARBOGRAN FA activated carbon:

- A dust-free application because of its granulated structure
- It adsorbs undesired coloring substances in beverages that have turned brown or are intensely colored
- It has a large inner surface and therefore results a high adsorptive capacity
- The granulate dissolves quickly and completely in the liquid
- The product can be used directly prior suspension not necessary
- It builds a compact turbidity depot thanks to good sedimentation

Application

In order to use the full adsorptive power of SIHA CARBOGRAN FA activated carbon we recommend that carbon fining will be carried out in the clarified and filtered beverage to prevent the turbidities from displacing the pores or surface of the activated carbon.

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

SIHA CARBOGRAN FA activated carbon can be added to the beverage without prior suspension. While it is being added the beverage should be stirred vigorously to guarantee that the product is evenly distributed in the liquid. Depending on the action of the agitator, it should be stirred for 10 to 20 minutes.

After approx. one hour, the beverage should be thoroughly stirred once again to utilize the full adsorptive capacity of SIHA CARBOGRAN FA activated carbon. 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

- For color correction of wines and juices that are intensely colored or have turned brown, a quantity of 1.67 – 3.34 lb/1,000 gal (20 – 40 g/hl) SIHA CARBOGRAN FA activated carbon is required.
- To improve the color of spirits,
 5.84 8.35 lb/1,000 gal (70 100 g/hl)
 SIHA CARBOGRAN FA activated carbon is required. The spirits should be qualified to drinking strength.
- To brighten intensely colored base wines for making sparkling wine, a quantity of 0.83 – 8.35 lb/1,000 gal (10 – 100 g/hl) is used, depending on the required degree of decolorization.
- Treatment of sugar solutions (approx. 60 °Brix) requires a quantity of 0.5 – 1.5% SIHA CARBOGRAN FA activated carbon by volume.
- The activated carbon dosage for wine treatment is limited to a maximum of 8.35 lb/1,000 gal (100 g/hl).

Pre-Application Test

The exact quantity of SIHA CARBOGRAN FA activated carbon is best determined by performing initial tests with 3.38 fl oz (100 ml) of the beverage. For this, a 5% suspension of SIHA CARBOGRAN FA activated carbon 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 correspond to a quantity of 0.83 lb/1,000 gal (10 g/hl) of SIHA CARBOGRAN FA activated carbon.

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





SIHA CARBOGRAN FA activated carbon 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)

The fining preparations with SIHA CARBOGRAN FA activated carbon should be stirred vigorously and then filtered off through a pleated filter which has been sufficiently wetted beforehand. The first 0.34 fl oz (10 ml) of the filtrate is discarded. Finally, the filtrate is compared with the initial sample. The exact quantity of SIHA CARBOGRAN FA activated carbon can be determined by comparing the colors of the two.

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 CARBOGRAN FA activated carbon are known.

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

Storage

SIHA CARBOGRAN FA activated carbon stores well. Due to the 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 CARBOGRAN FA activated carbon is sold under article no. 63.104 and is available in the following package sizes:

2.2 lb (1 kg) carton

10 x 2.2 lb (1 kg) carton in cardboard box 4 x 11.02 lb (5 kg) PE bag in cardboard box

33.07 lb (15 kg) PE bag 3802 10 00

Certified Quality

HS Customs Tariff:

SIHA CARBOGRAN FA activated carbon 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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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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