



Akticol FA-UF

Highly activated charcoal powder for colour reduction

Product description

Akticol FA-UF is an acid activated, highly effective activated plant-based powdered charcoal. The composition and purity of this activated charcoal allows a particularly low abrasion and gentle application when used in combination with crossflow filtration systems. Akticol FA-UF is highly effective, which means lower dosages can be used, further protecting the processing equipment. Particular attention has been paid when developing the activated charcoal to selective stabilisation of polyphenols and decolouration in apple juice.

Fields of application for Akticol FA-UF are:

- Colour reduction of deep colour and decolouration (fruit juice/must)
- Polyphenol stabilisation for the production of particularly stable fruit juice concentrates
- Adsorption of brownish colour pigments derived from Maillard reactions
- Use of charcoal in combination with crossflow filtration, i.e. in the ultrafiltration cycle without prior separation

Dosage

An activated charcoal treatment in clarified juice is always more effective than in cloudy juice because the high amount of sediment contained in the pure juices blocks the activated charcoal's pores. If the cloudy juice has to be treated to save a filtration process, the charcoal is added before the other treatment agents are added, possibly together with pectinases and amylases.

Generally, a temperature range of 45-55 °C and maximum sugar concentration of 30 °Brix are recommended. If treatment temperatures fall below 20 °C, a maximum of 20 °Brix should not be exceeded. To keep the activated charcoal moving during the treatment time, it should be stirred occasionally. A treatment time of 30-60 minutes is sufficient.

Provided Akticol FA-UF is mixed homogeneously with the cloudy juice, it can be fed directly into the crossflow system without further treatment. Optionally, partial separation may be conducted by sedimentation and filtration.

The required dosage depends on the material to be treated and the concentration of the substances to be removed. Fining tests should be conducted in order to avoid stressing the juice unnecessarily and to avoid unwanted reactions or eliminations. The choice of a suitable activated charcoal and process is particularly important.

The following recommended dosages can be used for guidance:

Intended purpose	Dosage [g/100 L]
Must decolourisation	20-40 (max. 100 g/100 L)
Stability improvement (colour, NTU) of the intermediate product	20-40
Juice decolouration	20-200

Storage

Activated charcoal is very prone to absorption of odours and moisture. This is why the product must always be protected against taint and moisture. Packs which have been opened should be immediately hermetically sealed. No liability can be accepted for improper storage and use.