Akticol FA-UF

Highly activated carbon powder for colour reduction during ultrafiltration

Product description
Akticol FA-UF is an acid activated, highly efficient activated carbon powder of plant origin. Composition and purity of this carbon allows a particularly abrasion-resistant, gentle and careful application when used in combination with crossflow filtration systems. Akticol FA-UF is highly efficient, which means, lower dosages can be used and thus, the risk of wearing out of processing plants is further minimized.

Application fields for Akticol FA-UF are:
- colour reduction in deep-coloured, oxidized juices and decolouration
- polyphenol stabilisation for the production of particular stable fruit juice concentrates
- adsorption of brownish colour pigments derived from Maillard reactions
- carbon application in combination with crossflow filtration, i.e., in the ultrafiltration cycle without prior separation

Dosage
An activated carbon treatment in clarified juice is always more effective than in the cloudy juice because of the high amount of sediments contained in the raw material clogging the carbon pores. When however, the cloudy juice is treated to save a filtration process, dosage is made before addition of the other treatment agents, probably together with pectinases and amylases. Generally, a temperature range of 45 - 55 °C and sugar of maximally 30 °Brix are suitable. If treatment temperatures fall below 20 °C, a maximum of 20 °Brix should not be exceeded. Stir in intervals to assure that the activated carbon is kept in suspension during treatment. A treatment period of 30 - 60 minutes is sufficient. Provided Akticol FA-UF is homogeneously mixed with the cloudy juice, it is fed directly into the crossflow system without further treatment. Partial separation may be conducted by sedimentation and filtration before filtration. The required dosage for treatment depends on the material to treat and on the concentration of the substances to remove. Not to stress the juice unnecessarily and to avoid undesirable reactions and elimination of substances, pre-tests have to be conducted in any case. It is especially important to choose the suitable activated carbon and the appropriate process.

Storage
Activated carbon is very sensitive to odour- and moisture. Therefore product must protect against off-flavour and moisture. Protect from moisture and foreign odours. Reseal opened packagings immediately air tight. For improper storage and application liability is excluded.