

## Solids removal from Balneo peat extracts

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### ABSTRACT

Alkaline extract of mud as well as Balneo peat mud presents antioxidant, anti-inflammatory, astringent, bacteriostatic and bactericidal properties and can be used as cosmetics and pharmaceuticals ingredients. Before application solids present in extract have to be removed. In the present work, two kinds of these processes were considered. A cake filtration process was considered with and without using a filter aid (fine diatomaceous earth). In both cases, the process was unstable in time due to the high resistance caused by the compressible cake formed from the separated solids. Due to the stability in time, a centrifugal sedimentation process was chosen. As optimum conditions to obtain near homogeneous extract (solid content not higher than 0.11 g/L), centrifugation at 6,000 n/min for 2 min was selected. Under this condition, the concentration of matter in the system was about 0.1 g/L.

*Keywords:* Filtration; Centrifugation; Balneo peat; Extract; Humic acids

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