

ABSTRACT

PROCESS FOR THE CLEAVAGE OF ALKYLARYL
HYDROPEROXIDES

The present invention claims a process for the cleavage of alkylaryl hydroperoxides, which comprises producing a mixture of a concentrate comprising at least one alkylaryl hydroperoxide to be cleaved and a cleavage product obtained from the cleavage of an alkylaryl hydroperoxide, dividing this mixture into at least two parts and cleaving the alkylaryl hydroperoxides in these parts in parallel at different temperatures. One of the two parts is treated at a temperature sufficiently high for an integrated thermal after-treatment to be able to be achieved.

Compared to conventional processes in which either steam or other heat exchange media are used for heating or additional alkylaryl hydroperoxide is added to the cleavage product, the process of the invention consumes considerably less energy since less steam, if any, has to be used, problems which can result from fouling in heat exchangers are largely prevented and the outlay for safety is reduced since no second feed point for alkylaryl hydroperoxide has to be provided.

The process of the invention can be used, in particular, in the preparation of phenol and acetone by the Hock method.

(Fig. 2)

