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## pH INFLUENCE ON SONOCHEMICAL DEGRADATION OF CYANIDES WITH $H_2O_2$ AND $O_2$

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## **Abstract**

The sonolytic degradation of cyanide ions (CN) in the presence of two oxidising agents: hydrogen peroxide and atmospheric oxygen was investigated in order to emphasise the influence of the initial value of the pH on the efficiency of the degradation process. The results prove that the pH value has a significant influence only on the process involving oxygen as oxidant. This observation suggests that cyanide oxidation with atmospheric oxygen in sonic field is the most convenient method for cyanide destruction: high efficiency, no chemicals required and no pH adjustment necessary.

Keywords: ultrasound, sonochemical degradation, cyanide ions, hydrogen peroxide, free radicals

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