

— ORIGINAL ARTICLE —

Chemical and Microbial Detoxification Methods of PCB-containing Waste - Chemical and Microbial Processes of PCB Decomposition -

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Abstract

In the previous paper (I), isolation and identification of microorganisms useful for PCB decomposition were described. Using the microorganisms, namely, two-stage-decomposition method (chemical dechlorination and biological decomposition of PCB) was carried out. As the result, it turned out that at the first stage of dechlorination chloride ions from PCB should react with NaOH in the solution to make NaCl which is an inorganic, harmless compound. Another characteristic of this method is that, compared with other methods so far reported, the cost of PCB decomposition is much lower and that no risk of explosion occurs in the process.