(Brief Summarys)

PCB Decomposition by Mercury-Lamp Light

To look for a simple way of decomposing PCB, we made a series of tests.

Kanechlor 400 and caustic potash were mixed with alcohol and then, 100W high-intensity mercury-lamp light was applied to the mixture.

Alcohol used includes methanol, ethanol, iso-prophy alcohol, n-propyl alcohol, iso butanol, n-butanol, iso-amyl alcohol, etc. Chlorine made free was quantified by Volhard method. In the case of using iso-propyl alcohol, nearly 100% of chlorine was let loose, leaving white crystals which was regarded as biphenyl. In the case of other kinds of alcohol, only 20 - 30% of chlorine was let loose. When ethanol was used, a small quantity of a certain hydroxide was obtained. Reaction under the sun light was also studied.

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