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PCB May Get Harmless

A Japanese scientist has claimed success in making the toxic industrial chemical PCB harmless by applying mercury-lamp light to the compound.

PCB (polychlorinated biphenyl) is widely used in industrial products including electric insulators, 'carbonless' copying paper and paint. It causes serious rashes, palay and other troubles.

About 1,000 persons in Northern Kyushu suffered PCB poisoning and 10 of them died in 1969 after they consumed rice-bran oil which accidentally was contaminated with PCB during production process.

The scientist, Assoc. Professor M. Eto of Kyushu University's Agricultural Faculty, says he has successfully removed chlorine 100 per cent from PCB after applying high-intensity mercury-lamp light for 10 hours to PCB.

He said that he had used potassium hydroxide as the solvent.

Successful results of similar experiments to decompose PCB, using ultraviolet or radioactive rays with other solvents, have been reported in the past by other research institutes. In the past experiments, PCB has mostly been reduced to biphenyl and acetone.

But what substances formed after dechlorination in his method is yet to be found out, Eto said.

The results of his experiment have recently been reported to the 135th Western Japan regional meeting of Society of Agricultural Chemical Industry (Japan) in Miyazaki, Kyushu.

Eto also said another experiment to dechlorinate PCB by exposing it to sunlight had been conducted by his students.

The experiment, the first of the kind in Japan, has been 12.9 to 16 per cent successful depending on different solvents used, he added.

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