Monsanto

ORGANIC CHEMICALS DIVISION

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SUMMARY--INTERIM STATUS

CHRONIC TOXICITY WITH AROCLORS

In May and June of 1969, two-year feeding studies were initiated with *Aroclors 1242, 1254 and 1260. The materials are being fed to rats and dogs at levels of 1, 10 and 100 parts per million in the diet.

After 11 months there have been no clinical effects observed in the rats in the Aroclor 1242 study. Animals sacrificed at six months showed negative micropathology. There have been no clinical effects in the dogs and blood and urine chemistry studies at the one, three and six month intervals were negative.

In the case of Aroclor 1254, rats have shown a slightly depressed weight gain at 100 ppm. In the animals sacrificed at six months, there was slight increased liver weights in males of the animals on the 100 ppm diet. Micropathology was negative at all levels. In the dogs there have been depressed weight gains in the females at all levels fed and at the 100 ppm level in the males. Blood and urine chemistry has been negative.

With Aroclor 1260 there has been no effect on weight gain but has been increased liver weights in males at the 10 and 100 ppm in the animals sacrificed at six months. Micropathology is negative. In the dogs there has been depressed weight gains in the females at 10 and 100 ppm and in the males at 100 ppm. Blood and urine chemistry has been negative.

The above data indicate that these materials are about the same order of toxicity as DDT in rats and dogs. This is reassuring in that DDT is probably the least toxic insecticide to mammalian species. Further, there is general agreement that DDT has not presented a hazard in animals or man in spite of its presence in the environment.

Interim or progress reports such as above have been provided periodically to the U. S. Food and Drug Administration, the U. S. Department of Agriculture and other governmental agencies. In addition, the data and the progress of the studies have been discussed candidly with Dr. Edward J. Burger, Jr., in the Office of Science and Technology, Executive Office of the President.

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*Aroclors 1242, 1254 and 1260 are polychlorinated biphenyls containing 42%, 54% and 60% of chlorine respectively.