Monsanto

Aroclor F

FROM (NAME & LOCATION): R. E. Keller - Technology Department - South Second Street

DATE: October 20, 1970

SUBJECT: FURANS IN AROCLOR PRODUCTS

REFERENCE:

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The attached report by Dr. Mieure shows that Aroclor 1242, 1242B, 1254 and 1260 contains no detectable polychlorinated dibenzofurans. Aroclor 5442 contains detectable tetrachlorodibenzofuran at 1-3 ppm. Competitive Prodelec Phenoclor DP6 contains considerably more dibenzofurans.

On this basis, the Aroclor 1200 series sent for feeding studies at Bio-Test appears free (< 1-5 ppm) of furan contaminants which might bias the results. It will be noted, however, that these products do contain varying amounts of polychlorinated naphthalenes. Would toxicity results from feeding studies be affected by these impurities?

Polychlorinated anthracene or phenanthrene and tetrachlorodibenzofuran impurities found in Aroclor 5442 probably explain why the National Water Quality Laboratory at Duluth, Minnesota finds that Aroclor 5442 is much more toxic to Daphnia than any of the PCB's.

The report doesn't mention it, but no polychlorodibenzo-p-dioxins were found in any of the products. The detection limit is an estimated 1-5 ppm depending on the specific impurity and product involved.

REK

R. E. Keller

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Attachment

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