INSTITUUT VOOR
RINAIRE FARMACOLOGIE
/ EN TOXICOLOGIE
DER RIJKSUNIVERSITEIT
TE UTRECHT

RECTEUR: Prof. H. VAN GENDEREN

No.

Bericht op:

Betreffende:

Bijlagen:

UTRECHT, March 13, 1969
Biltstraat 172
Telefoon No. 715544

Monsanto Chemicals Ltd,
800 North Lindbergh Boulevard,
ST.LOUIS (Missouri)
USA

Dear Sir,

In June last year you kindly supplied us on our request with a number of Aroclor samples.

Particularly Aroclor 1260 proved to have a peak pattern which strongly resembles the pattern observed in gas chromatograms of extracts from tissues of sea birds living along the Netherlands' coast. This qualitative resemblance was further confirmed by using a gas chromatograph in conjunction with a mass spectrometer.

A paper concerning the qualitative composition of similar residues in fish in the river Rhine and birds in the Wadden Sea area has been accepted for publication by "Nature" and we will send you a reprint as soon as they are available.

The quantitative evaluation of the residues was carried out by peak height comparison using one of the prevalent peaks in the gas chromatograms. In due course we will be able to check this procedure by comparison with quantitative measurements carried out with a microcoulometric detection system. We would like to go further and identify the isomers.

With the method used at the moment residue levels in sea bird tissues range up to 150 ppm. In the laboratory we have tested a PCB-mixture in a semichronic toxicity assay with Japanese quails. Tissues residues in quail which died during this test were much higher than those found in birds which died in our coastal areas. Still, we would like to extend our toxicological information in order to try to establish a "no-effect-level" in semi-chronic (three months) tests for at least some of the different compounds present in the wild birds' tissues.

We would be glad to know if your company might have available for our purpose some members of the PCB as pure compounds with known position of the chlorine atoms. We are particularly interested in those with 4 up to 8 chlorine atoms. For the identification in g.l.c. analysis about 100 mg of each compound would be enough. For the toxicological tests (with Japanese quails), if possible supplemented with rats, a minimum of 10 g is needed.

We hope that you may help us and we look forward to your reply.

DSW 018338

Sincerely yours,

H. van Genderen.
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Toxicology, University of Utrecht,
Biltstraat 172, Utrecht (The Netherlands)

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