Monsanto

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Organic Chemicals - PCB - Environmental Studies, Europe

Biodegradation

13 day exposure of MCS 1016 to biphenyl-active soil culture (C_2) has produced considerable degradation of all major peaks in the chromatogram. Exposure will be continued to 83 days. Qualitatively it appears that degradation is greater than for Aroclor 1242, but identification and quantification of residues must be accomplished to provide adequate definition of the extent of degradation.

13 day exposure of MCS 717 to C_2 shows considerable degradation. Qualitative judgement indicates more degradation than for Aroclor 1242. MCS 762 is also being examined.

Work on the key hexa- and penta chlorinated isomers has continued using C_2. Increasing agitation has failed to induce degradation so far, but work in which lower chlorine isomers have been added to increase solubility, is in progress. The degradation of HB40 is being assessed. Sample has been exposed to C_2. Analytical work is in progress, but the complexity of the chromatograms has caused some delay in interpretation.

Development of GLC techniques to provide greater selectivity in the analysis of PCBs is proceeding satisfactorily.

Environmental Studies

The NERC report on the Irish Sea Incident has not yet been published, but copies of the draft have been sent to the contributing bodies. We have now made a written request for a copy of this draft, but do not yet know whether this will be approved.

A further meeting on PCB analysis has been arranged by the Ministry of Agriculture, Fisheries and Food to take place late in September.

A paper has been prepared, for presentation at the CIGRE conference in Paris this month, on the PCB pollution problem as it affects the use of askarels in the electrical industry. This is intended to generate discussion amongst askarel users.

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