Monsanto

Aroclors FF

FROM (NAME & LOCATION): E. M. Emery - St. Louis Organic Research - Applied Sciences Section

DATE: July 7, 1970

CC: W. R. Richard
J. W. Baker

SUBJECT: Minutes of Meeting on Biodegradation Testing of Replacement Products for Dielectric Aroclor - June 30, 1970

REFERENCE:

TO: Those present:

R. H. Munch
R. E. Keller
E. S. Tucker
V. W. Saeger
E. M. Emery

The purpose of the meeting was to develop plans for testing the biodegradability of the proposed replacement products for Aroclor 1242 in dielectric applications.

Immediate Goal: Determine the biodegradability of the replacement Aroclor products relative to the standard Aroclor.

Long-Term Goal: Determine the biodegradation rates in the environment of the standard Aroclor and the replacement products.

Ultimately, three types of data need to be determined on every product: the level which is truly harmful or toxic in the environment, the rate at which the product is entering the environment, and the rate at which the product is disappearing from the environment.

The following plans were developed for achieving the first immediate goal:

Presently Known: The composition of both standard Aroclor and the replacement products by isomers and/or chlorine level.

Approach: Use the semi-continuous activated sludge test and follow the disappearance by the present EC/GC analytical method in which GC peaks are identified by chlorine level only.

Report: Relative percent degradation of each GC peak from the EC/GC analysis as well as percent degradation of the total product.

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Products To Be Tested: Aroclor 1242
Aroclor 1254
Aroclor 1242B
Aroclor 1230B

Aroclor 1242 needs to be tested because it represents the present standard. Aroclor 1254 will be tested because it is identified by all investigators as being the most prevalent in the environment.

Aroclor 1242 testing will begin immediately to determine the effect of concentration on the activated sludge units. Tests on the other three will begin as soon as additional EC/GC equipment is acquired.

E. M. Emery will review the present equipment needs and make a recommendation for the purchase of any required equipment.

E. M. Emery

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