cc: W. B. Papageorge - GO
W. R. Richard - GO
E. P. Wheeler - GO
M. W. Dietrich - Res. 2
E.M. Emery - Res. 2
E. S. Tucker - Res. 2

Monsanto
COMPANY
ORGANIC CHEMICALS DIVISI
1700 South Second Street
St. Louis, Missouri 63177
(314) MAin 1-4000

Aroclor F

July 21, 1970

Dr. J. G. Vos
Institute of Veterinary
Pharmacology and Toxicology
University of Utrecht
Biltstraat 172
UTRECHT, The Netherlands

Dear Dr. Vos:

Many thanks for the manuscript concerning the identification of chlorinated dibenzofurans in PCB which you sent on June 24. We plan to investigate this procedure and use it for similar determinations.

We have made an effort to locate chlorinated naphthalenes which you are attempting to locate as reference compounds for gas chromatography. We have in hand samples which were purchased about one year ago from Koppers Company, Inc., Koppers Building, 436 Seventh Avenue, Pittsburgh, Pennsylvania, 15219. These products of unknown purity are identified as follows:

Halowax 1000	Monochloro naphthalene
Halowax 1001	Tri and Tetrachloro naphthalene
Halowax 1013	Tetra and Pentachloro naphthalene - 56%
Halowax 1014	Penta and Hexachloro naphthalene - 62%
Halowax 1051	Octa - 70%
Halowax 1099	Tri and Tetra - 52%

We will be happy to provide you gram amounts of any of these compounds if you feel they would be of value to you. You may wish to contact Koppers Company directly and obtain a more complete listing of available products of this type.

You commented that Dr. Koeman will send a total body sample of a cormorant containing a high concentration of PCB's for a comparison of the quantitative aspects of the analytical methods. We have not yet received this sample.

Please let us know if we can be of further assistance.

Sincerely,

REK

Robert E. Keller, Manager
Applied Sciences Section

db

MONS 206327

Monsanto

FROM (NAME & LOCATION): R. E. Keller - R&D Laboratories - South Second Street

DATE: June 30, 1970

SUBJECT: CHLORINATED DIBENZOFURANS - PCB

REFERENCE:

cc: H. S. Bergen - GO
W. R. Richard - GO
E. P. Wheeler - GO
M. W. Dietrich - Res. 2
E. M. Emery - Res. 2

TO: W. B. Papageorge
General Offices

The attached letter and manuscript have been received from Dr. J. G. Vos at the University of Utrecht. It is in reply to our request for details of their work on the identification of chlorinated dibenzofurans in PCB. Please note that this manuscript has been sent on a confidential basis and it is not for general distribution.

We will attempt to provide chlorinated naphthalenes requested for gas chromatography work by Vos. Bill Richard thinks we might be able to obtain these commercially. Dr. Emery is asked by copy of this memo to determine if we have any of these compounds in SRC.

Drs. Dietrich and Emery are asked by copy of this memo to please review the manuscript and determine the difficulty of applying this technique to our Aroclor products. Assuming this is within our capabilities with a reasonable amount of effort, we will look at Aroclor products used at Bio-Test for feeding studies and compare results with those for current production grade materials.

R. E. Keller

db
Attachments - 2

Samples

Halowax	1000	monochloro naphthalene	
"	1001	Tri and Tetra chloro "	
"	1013	Tetra and Penta " "	50%
"	1014	Penta and Hexa "	62%
"	1051	Octa	10%
"	1099	Tri and Tetra	52%
"	2444		37%

alpha Chloronaphthalene - 2

MONS 206328

FN 10 REV 11-69

June 5, 1970

AIR MAIL

Professor H. Van Genderen
Institut Voor Veterinaire
Farmacologie en Toxicologie
Der Rijksuniversiteit te Utrecht
Biltstraat 172
Utrecht, The Netherlands

Dear Professor Van Genderen:

We appreciate your hospitality during our recent visit with you and your colleagues and wish to thank you for your comments. We are especially interested in the identification of furan type materials in polychlorinated biphenyls described at our meeting. We plan to carry out work of this type in the near future. It is my understanding that you use distillation/GC/mass spectrometry techniques for this work. Perhaps you or Dr. Koeman could make the details of the isolation and/or concentration procedures for furans available to us. We will be very appreciative of any guidance you could give on this point.

Again, many thanks for your help.

Sincerely,

Robert E. Keller
Manager
Applied Sciences Section

db

bcc: W. B. Papageorge
E. P. Wheeler
M. W. Dietrich
J. P. Mieure

MONS 206329